

9 Appendix

Stream Habitat Modeling to Support Water Management Decisions for the North Fork Shenandoah River, Virginia

FINAL REPORT

Prepared for

Northern Shenandoah Valley Regional Commission
North Fork Instream Flow Technical Advisory Committee

9.1 List of Active Partnership Participants

Moderator: Tom Christoffel

Elected Chair: Alison Teetor, Natural Resources Planner, Clarke County

Elected Vice-Chair: Doug Stanley, County Administrator/Planning Director, Warren Co.

Elected Secretary: Richard Rau, Public Works/Utilities Director, Town of Berryville

MIF Partners – Agencies, Organizations, Businesses	Participant Attendees
Adams Nelson Realty	Jim McLaurin
Clarke County Citizens Council	Bud Nagelvoort
Community Consensus Coalition	Jim Lawrence
Department of Environmental Quality – Valley Regional Office	Ron Phillips
Frederick County citizens	Priscilla Lehman, Peggy Hodgson
Frederick County Planning Commissioner	Pat Gochenour
Friends of the North Fork Shenandoah River	Charles Hockman, Meredith Sine, Sarah Faulconer; John Kreitsburg
Friends of the Shenandoah River	Charles Vandervoort, Dave Nelson, Bud Nagelvoort
Harrisonburg Public Utilities	Mike Collins
Hazen and Sawyer	Bruce Piersdorf, Ellen Hall
Holman’s Creek Watershed	Rob Arner
HSMM	Ron Smith
Interstate Commission on the Potomac River Basin	Joseph Hoffman, Executive Director
Lord Fairfax Soil and Water Conservation District	Lyle Schertz, Ray Brownfield, Bud Nagelvoort
Metro Washington COG	Jim Shell, Stuart A. Freudberg
PA Consulting Group	John Cromwell
Piedmont Environmental Council	Camra Mills
Rockingham County Planning Department	Hadley Jenner
Shenandoah Scenic River Advisory Committee	Bud Nagelvoort
Shenandoah Valley Pure Water Forum	Bruce Lundeen
Southeast RCAP	Rob Arner
The Opequon Watershed	Jim Giraytys
Trout Unlimited	Bud Nagelvoort
VA Professional Paddlesports Association	Trace Noel
Valley Conservation Council	Gavin Sanders
Virginia Department of Environmental Quality – Water Supply Planning	Terry Wagner
Virginia Department of Game and Inland Fisheries	Larry Mohn, Stephen Reeser, John Kauffman
Virginia Polytechnic Institute and State University (Virginia Tech)	Dr. Donald Orth, Adrienne Averett, Jason Persinger, Jennifer Rohrer
VISION	Jim Giraytys
United States Geological Survey (USGS)	Donald Hayes, Jennifer Krstolic

9.2 Plains Mill Site Profile

Latitude/Longitude: 38 38 55.60N; 78 42 00.12W; Datum = NAD 83

County: Shenandoah and Rockingham

Quad Map: New Market

Elevation: ~ 925 ft

RMI: ~ 81

Total Transects: 9

Mesohabitat Type: riffle, run, pool

Slope: 0.00063; WSL measured on RB

Site Length (total centerline distance): 1904.82 ft

Representative Gauge: Cootes Store gauging station #01632000

Data Collection Summary

Transects

Number & ID	Distance	Habitat	Date Set	Vertical Spacing	Benchmark
PM – T1 0.00	0 ft	Run	08/09/2000	4 ft	TBM - 6
PM – T2 56.54	56.54 ft	Pool	07/12/2000	4 ft	TBM - 6
PM – T3 214.48	157.94 ft	Riffle	07/12/2000	4 ft	TBM - 6
PM – T4 315.97	101.49 ft	Run	08/09/2000	4 ft	TBM - 6
PM – T5 421.81	105.84 ft	Pool	08/09/2000	4 ft	PM-4 TBM
PM – T6 481.85	60.04 ft	Pool	07/12/2000	4 ft	PM-4 TBM
PM – T7 936.93	455.08 ft	Run	07/12/2000	4 ft	PM-5 TBM
PM – T8 1357.33	420.40 ft	Run	07/12/2000	4 ft	PM-6 TBM
PM – T9 1904.82	547.49 ft	Run	07/12/2000	4 ft	PM-7 TBM

Benchmark Set: 07/28/2000
Benchmark Tied: 11/02/2000
Cross-sectional Profile: 08/10, 21, 28/2000
Substrate and Cover: 08/08, 09/2000
Horizontal Survey: 03/08/2001
Reach Q measured at: PM – T5, PM – T7

Calibration Sets

Transect	Date	LOW		Date	MED.		Date	HIGH	
		WSL (ft)	Reach Q (cfs)		WSL (ft)	Reach Q (cfs)		WSL (ft)	Reach Q (cfs)
PM – T1	08/07/2002	96.36	22.5	09/18/2000	96.60	44.80	08/09/2000	97.02	102.82
PM – T2	08/07/2002	96.36	22.5	11/13/2000	96.70	51.01	09/19/2000	96.86	79.99
PM – T3	08/07/2002	97.05	22.5	09/18/2000	97.29	44.80	08/08/2000	97.76	118.85
PM – T4	08/07/2002	97.26	22.5	10/30/2000	97.50	33.91	09/19/2000	97.78	79.99
PM – T5	08/07/2002	97.25	22.5	11/15/2000	97.51	45.98	09/19/2000	97.75	79.99
PM – T6	08/07/2002	97.25	22.5	11/13/2000	97.65	51.01	08/09/2000	97.96	102.82
PM – T7	08/07/2002	97.54	22.5	09/18/2000	97.70	44.80	08/08/2000	98.14	118.85
PM – T8	08/07/2002	97.62	22.5	10/30/2000	97.70	33.91	09/19/2000	97.98	79.99
PM – T9	08/07/2002	97.69	22.5	11/15/2000	97.92	45.98	08/08/2000	98.32	118.85

Plains Mill Site Profile, continued

PHABWIN Modeling Specifics

1. Weighting Factors:

T 1	0.1
T 2	0.0
T 3	1.0
T 4	1.0
T 5	0.2
T 6	0.5
T 7	0.1
T 8	0.1
T 9	0.0

2. Best calibration discharge (CalQ) was defined as the discharge measured at PM – T5 and PM – T7 for each flow period (low, medium, and high):

	<u>CalQ 1</u>	<u>CalQ 2</u>	<u>CalQ 3</u>
T 1	22.5	44.80	102.82
T 2	22.5	51.01	79.99
T 3	22.5	44.80	118.85
T 4	22.5	33.91	79.99
T 5	22.5	45.98	79.99
T 6	22.5	51.01	102.82
T 7	22.5	44.80	118.85
T 8	22.5	33.91	79.99
T 9	22.5	45.98	118.85

3. Simulation flows:

5	33.91	51.01	90	120	170	300
10	40	60	100	130	180	400
20	44.8	70	102.82	140	190	500
22.5	45.98	79.99	110	150	200	600
30	50	80	118.85	160	250	700

4. Water Surface Elevation Model: MNSQ

5. Calibration discharge selected for calibration of WSL longitudinal profile: CalQ 3

Plains Mill Site Profile, continued

6. Beta values:

T 1	0.632
T 2	0.814
T 3	0.244
T 4	0.587
T 5	0.833
T 6	0.804
T 7	0.333
T 8	0.800
T 9	0.381

7. Velocity Model: one model method for all transects

Model	Flow Range	CalQ
1	5 – 700	118.85

Model QA/QC: Modeling Efficiency Statistic (EF)

WSL Model

	EF (all transects)
CalQ 1	1.00
CalQ 2	1.00
CalQ 3	1.00

Velocity Model

	EF CalQ 3
T 1	0.98
T 2	0.92
T 3	0.73
T 4	0.49
T 5	0.49
T 6	0.97
T 7	0.57
T 8	- 0.45
T 9	0.92

9.3 Laurel Hill Farm Site Profile

Latitude/Longitude: 38 50 12.48N; 78 31 38.80W; Datum = NAD 83

County: Shenandoah

Quad Map: Edinburg

Elevation: ~ 730 ft

RMI: ~ 56

Total Transects: 5

Mesohabitat Type: riffle, run

Slope: 0.00259; WSL measured on RB

Site Length (total centerline distance): 332.74 ft

Representative Gauge: Mount Jackson gauging station #01633000

Data Collection Summary

Transects

Number & ID	Distance	Habitat	Date Set	Vertical Spacing	Benchmark
LHF – T1 0.00	0 ft	Run	07/12/2000	4 ft	TBM - 4
LHF – T2 148.98	148.98 ft	Run	07/12/2000	4 ft	TBM - 4
LHF – T3 248.12	99.14 ft	Run	07/12/2000	4 ft	TBM - 4
LHF – T4 291.68	43.56 ft	Riffle	07/12/2000	4 ft	TBM - 4
LHF – T5 332.74	41.06 ft	Riffle	07/12/2000	4 ft	TBM - 4

Benchmark Set: 07/27/2000

Benchmark Tied: 07/27/2000

Cross-sectional Profile: 07/27/2000

Substrate and Cover: 08/22/2000

Horizontal Survey: 03/08/2001

Reach Q measured at: LHF– T1

Calibration Sets

Transect	Date	LOW		Date	MED.		Date	HIGH	
		WSL (ft)	Reach Q (cfs)		WSL (ft)	Reach Q (cfs)		WSL (ft)	Reach Q (cfs)
LHF – T1	11/01/2000	96.51	93.8	07/27/2000	96.66	120	03/20/2001	97.64	395
LHF – T2	11/01/2000	96.57	93.8	07/27/2000	96.73	120	03/20/2001	97.69	395
LHF – T3	11/01/2000	96.78	93.8	07/27/2000	96.82	120	03/20/2001	97.73	395
LHF – T4	11/01/2000	97.04	93.8	07/27/2000	97.10	120	03/20/2001	97.71	395
LHF – T5	11/01/2000	97.64	93.8	07/27/2000	97.64	120	03/20/2001	97.97	395

Laurel Hill Farm Site Profile, continued

PHABWIN Modeling Specifics

1. Weighting Factors:

T 1	0.5
T 2	0.5
T 3	0.5
T 4	0.5
T 5	0.0

2. Best calibration discharge (CalQ) was defined as the discharge measured at LHF – T1 for each flow period (low, medium, and high):

CalQ 1	93.8 cfs
CalQ 2	120 cfs
CalQ 3	395 cfs

3. Simulation flows:

5	50	93.8	140	190	400
10	60	100	150	200	500
20	70	110	160	250	600
30	80	120	170	300	700
40	90	130	180	395	

4. Water Surface Elevation Model: MNSQ

5. Calibration discharge selected for calibration of WSL longitudinal profile: CalQ 3

6. Beta values:

T 1	0.257
T 2	0.087
T 3	0.010
T 4	0.382
T 5	0.643

7. Velocity Model: mixed model method for all transects

Model	Flow Range	CalQ
1	5 – 93.8	93.8
2	93.8 – 395	120
3	395 – 700	395

Laurel Hill Farm Site Profile, continued

Model QA/QC: Modeling Efficiency Statistic (EF)

WSL Model

	EF (all transects)
CalQ 1	1.00
CalQ 2	0.99
CalQ 3	1.00

Velocity Model

	EF		
	CalQ 1	CalQ 2	CalQ 3
T 1	1.00	1.00	1.00
T 2	1.00	0.95	0.94
T 3	0.99	0.99	0.99
T 4	0.94	0.94	0.99
T 5	0.41	0.57	0.99

9.4 Spring Hollow Site Profile

Latitude/Longitude: 38 53 12.07N; 78 28 44.82W; Datum = NAD 83

County: Shenandoah

Quad Map: Toms Brook

Elevation: ~ 650 ft

RMI: ~ 42

Total Transects: 5

Mesohabitat Type: riffle, run

Slope: 0.00374; WSL measured on RB

Site Length (total centerline distance): 227.87 ft

Representative Gauge: Strasburg gauging station #01634000

Data Collection Summary

Transects

Number & ID	Distance	Habitat	Date Set	Vertical Spacing	Benchmark
SH – T1	0.00	0 ft	07/13/2000	3 ft	TBM - 3
SH – T2	91.14	91.14 ft	07/13/2000	3 ft	TBM - 3
SH – T3	138.18	47.04 ft	07/13/2000	3 ft	TBM - 3
SH – T4	170.51	32.33 ft	07/13/2000	3 ft	TBM - 3
SH – T5	227.87	57.36 ft	07/13/2000	3 ft	TBM - 3

Benchmark Set: 07/25/2000

Benchmark Tied: 07/26/2000

Cross-sectional Profile: 07/26/2000

Substrate and Cover: 08/21/2000

Horizontal Survey: 03/07/2001

Reach Q measured at: SH – T1

Calibration Sets

Transect	Date	LOW		MED.		HIGH			
		WSL (ft)	Reach Q (cfs)	Date	WSL (ft)	Reach Q (cfs)	Date	WSL (ft)	Reach Q (cfs)
SH – T1	10/31/2000	95.52	94.5	07/26/2000	95.76	126	03/19/2001	96.46	432
SH – T2	10/31/2000	95.71	94.5	07/26/2000	95.92	126	03/19/2001	96.71	432
SH – T3	10/31/2000	95.97	94.5	07/26/2000	96.16	126	03/19/2001	96.84	432
SH – T4	10/31/2000	96.13	94.5	07/26/2000	96.29	126	03/19/2001	96.97	432
SH – T5	10/31/2000	96.45	94.5	07/26/2000	96.55	126	03/19/2001	97.16	432

Spring Hollow Site Profile, continued

PHABWIN Modeling Specifics

1. Weighting Factors:

T 1	1.0
T 2	0.5
T 3	0.5
T 4	0.5
T 5	0.0

2. Best calibration discharge (CalQ) was defined as the discharge measured at SH – T1 for each flow period (low, medium, and high):

CalQ 1	94.5 cfs
CalQ 2	126 cfs
CalQ 3	432 cfs

3. Simulation flows:

5	50	94.5	130	180	400
10	60	100	140	190	432
20	70	110	150	200	500
30	80	120	160	250	600
40	90	126	170	300	700

4. Water Surface Elevation Model: MNSQ

5. Calibration discharge selected for calibration of WSL longitudinal profile: CalQ 3

6. Beta values:

T 1	0.357
T 2	0.246
T 3	0.229
T 4	0.226
T 5	0.371

7. Velocity Model: mixed model method for all transects

Model	Flow Range	CalQ
1	5 – 94.5	94.5
2	94.5 – 432	126
3	432 – 700	432

Spring Hollow Site Profile, continued

Model QA/QC: Modeling Efficiency Statistic (EF)

WSL Model

	EF (all transects)
CalQ 1	0.99
CalQ 2	0.99
CalQ 3	1.00

Velocity Model

	EF		
	CalQ 1	CalQ 2	CalQ 3
T 1	0.98	1.00	0.99
T 2	0.97	0.99	1.00
T 3	0.88	0.98	0.97
T 4	0.91	0.94	0.95
T 5	0.98	0.99	0.82

9.5 Posey Hollow Site Profile

Latitude/Longitude: 38 56 28.49N; 78 23 08.99W; Datum = NAD 83

County: Shenandoah

Quad Map: Toms Brook

Elevation: ~ 550 ft

RMI: ~ 21

Total Transects: 5

Mesohabitat Type: riffle, run, pocket-run

Slope: 0.00048; WSL measured on RB

Site Length (total centerline distance): 334.41 ft

Representative Gauge: Strasburg gauging station #01634000

Data Collection Summary

Transects

Number & ID	Distance	Habitat	Date Set	Vertical Spacing	Benchmark
PH – T1	0.00	0 ft	07/11/2000	5 ft	TBM - 2
PH – T2	121.58	121.58 ft	07/11/2000	5 ft	PH-T3 BM
PH – T3	173.74	52.16 ft	07/11/2000	5 ft	PH-T3 BM
PH – T4	261.65	87.91 ft	07/11/2000	5 ft	PH-T5 BM
PH – T5	334.41	72.76 ft	07/11/2000	5 ft	PH-T5 BM

Benchmark Set: 08/10/2000

Benchmark Tied: 11/01/2000

Cross-sectional Profile: 08/10/2000

Substrate and Cover: 08/10/2000

Horizontal Survey: 04/20/2001

Reach Q measured at: PH – T3

Calibration Sets

Transect	Date	LOW		Date	MED.		Date	HIGH	
		WSL (ft)	Reach Q (cfs)		WSL (ft)	Reach Q (cfs)		WSL (ft)	Reach Q (cfs)
PH – T1	09/14/2001	91.38	126	08/10/2000	91.77	216	04/19/2001	92.23	668
PH – T2	09/13/2001	91.38	126	08/10/2000	90.67	216	04/19/2001	92.32	668
PH – T3	09/13/2001	91.38	126	08/10/2000	90.68	216	04/19/2001	92.34	668
PH – T4	09/14/2001	91.50	126	08/10/2000	91.16	216	04/19/2001	92.39	668
PH – T5	09/13/2001	91.53	126	08/10/2000	91.21	216	04/19/2001	92.35	668

Posey Hollow Site Profile, continued

PHABWIN Modeling Specifics

1. Weighting Factors:

T 1	0.5
T 2	0.5
T 3	0.5
T 4	0.1
T 5	0.0

2. Best calibration discharge (CalQ) was defined as the discharge measured at PH – T3 for each flow period (low, medium, and high):

CalQ 1	126 cfs
CalQ 2	216 cfs
CalQ 3	668 cfs

3. Simulation flows:

5	50	100	140	190	400
10	60	110	150	200	500
20	70	120	160	216	600
30	80	126	170	250	668
40	90	130	180	300	700

4. Water Surface Elevation Model: WSP

5. Calibration discharge selected for calibration of WSL longitudinal profile: CalQ 3

6. Manning's N and RMOD values:

	CalQ 1 RMOD = 3.05	CalQ 2 RMOD = 2.85	CalQ 3 RMOD = 1.00
T 1	0.125	0.117	0.041
T 2	0.125	0.117	0.041
T 3	0.165	0.154	0.054
T 4	0.122	0.114	0.040
T 5	0.125	0.117	0.041

7. Velocity Model: mixed model method for all transects

Model	Flow Range	CalQ
1	5 – 126	126
2	126 – 668	216
3	668 – 700	668

Posey Hollow Site Profile, continued

Model QA/QC: Modeling Efficiency Statistic (EF)

WSL Model

	EF (all transects)
CalQ 1	0.77
CalQ 2	0.86
CalQ 3	0.94

Velocity Model

	EF		
	CalQ 1	CalQ 2	CalQ 3
T 1	0.71	0.95	0.09
T 2	0.62	0.99	0.93
T 3	0.98	1.00	0.99
T 4	0.99	0.99	0.90
T 5	0.96	0.93	0.94

9.6 Route 648 Site Profile

Latitude/Longitude: 38 57 15.61N; 78 23 02.95W; Datum = NAD 83

County: Shenandoah

Quad Map: Toms Brook

Elevation: ~ 530 ft

RMI: ~ 18

Total Transects: 7

Mesohabitat Type: riffle, run, pocket-run

Slope: 0.00022; WSL measured on LB

Site Length (total centerline distance): 704.04 ft

Representative Gauge: Strasburg gauging station #01634000

Data Collection Summary

Transects

Number & ID	Distance	Habitat	Date Set	Vertical Spacing	Benchmark	
648 – T1	0.00	0 ft	Riffle	07/11/2000	5 ft	TBM - 1
648 – T2	105.94	105.94	Run	07/11/2000	5 ft	TBM - 1
648 – T3	250.25	144.31	Pocket Run	07/11/2000	5 ft	648-T3 BM
648 – T4	461.67	211.42	Run	07/11/2000	5 ft	648-T7 BM
648 – T5	529.25	67.58	Pocket Run	07/11/2000	5 ft	648-T7 BM
648 – T6	609.29	80.04	Run	07/11/2000	5 ft	648-T7 BM
648 – T7	704.04	94.75	Pocket Run	07/11/2000	5 ft	648-T7 BM

Benchmark Set: 08/29/2000

Benchmark Tied: 08/31/2000

Cross-sectional Profile: 08/29/2000

Substrate and Cover: 11/14, 15/2000

Horizontal Survey: 03/01/2001

Reach Q measured at: 648 – T1 for medium and high flow, 648 – T2 for low flow

Calibration Sets

Transect	Date	LOW		Date	MED.		Date	HIGH	
		WSL (ft)	Reach Q (cfs)		WSL (ft)	Reach Q (cfs)		WSL (ft)	Reach Q (cfs)
648 – T1	11/05/2001	89.50	87.0	08/30/2000	89.94	136	08/16/2001	90.60	526
648 – T2	11/05/2001	89.62	87.0	08/30/2000	90.00	136	08/16/2001	90.69	526
648 – T3	11/06/2001	89.59	83.4	08/30/2000	90.01	136	08/16/2001	90.74	526
648 – T4	11/05/2001	89.62	87.0	08/30/2000	90.05	136	08/17/2001	90.82	526
648 – T5	11/06/2001	89.63	83.4	08/30/2000	90.07	136	08/16/2001	90.65	444
648 – T6	11/06/2001	89.65	83.4	08/30/2000	90.07	136	08/16/2001	90.89	526
648 – T7	11/06/2001	89.66	83.4	08/30/2000	90.09	136	08/17/2001	90.69	444

Route 648 Site Profile, continued

PHABWIN Modeling Specifics

1. Weighting Factors:

T 1	0.5
T 2	1.0
T 3	0.5
T 4	1.0
T 5	0.2
T 6	0.8
T 7	0.0

2. Best calibration discharge (CalQ) was defined as the discharge measured at 648 – T1 medium and high flows, and 648 – T2 for low flows.

	CalQ 1	CalQ 2	CalQ 3
T 1	87.0	136	526
T 2	87.0	136	526
T 3	83.4	136	526
T 4	87.0	136	526
T 5	83.4	136	444
T 6	83.4	136	526
T 7	83.4	136	444

3. Simulation flows:

5	50	87	130	170	300	600
10	60	90	136	180	400	700
20	70	100	140	190	444	
30	80	110	150	200	500	
40	83.4	120	160	250	526	

4. Water Surface Elevation Model: WSP

5. Calibration discharge selected for calibration of WSL longitudinal profile: CalQ 3 at 526 cfs

6. Manning's N and RMOD values:

	CalQ 1 RMOD = 2.26	CalQ 2 RMOD = 2.06	CalQ 3 RMOD = 1.00
T 1	0.084	0.076	0.037
T 2	0.084	0.076	0.037
T 3	0.129	0.117	0.057
T 4	0.099	0.091	0.044
T 5	0.210	0.192	0.093
T 6	0.047	0.043	0.021
T 7	0.127	0.115	0.056

Route 648 Site Profile, continued

7. Velocity Model: mixed model method for all transects

Model	Flow Range	CalQ
1	5 – 87	87
2	87 – 444	136
3	444 – 700	526

Model QA/QC: Modeling Efficiency Statistic (EF)

WSL Model

	EF (all transects)
CalQ 1	0.81
CalQ 2	1.00
CalQ 3	-0.47

Velocity Model

	EF		
	CalQ 1	CalQ 2	CalQ 3
T 1	0.72	0.98	0.94
T 2	0.99	0.90	0.97
T 3	0.54	0.84	0.82
T 4	0.89	0.98	0.93
T 5	0.92	0.94	0.93
T 6	0.98	0.99	0.95
T 7	0.88	0.50	0.81

9.7 Winchester Dam Site Profile

Latitude/Longitude: 38 58 51.62N; 78 17 27.30W; Datum = NAD 83

County: Warren

Quad Map: Strasburg

Elevation: ~ 490 ft

RMI: ~ 7

Total Transects: 3

Mesohabitat Type: artificial pool

Slope: 0.00340; WSL measured on LB

Site Length (total centerline distance): 155.48 ft

Representative Gauge: Strasburg Gauging Station #01634000

Data Collection Summary

Transects

Number & ID	Distance	Habitat	Date Set	Vertical Spacing	Benchmark
WD – T1	0.00	0 ft	08/22/2000	5 ft	WD-T1 BM
WD – T2	89.52	89.52 ft	08/22/2000	5 ft	WD-T2 BM
WD – T3	155.48	65.96 ft	08/22/2000	5 ft	WD-T2 BM

Benchmark Set: 08/22/2000

Benchmark Tied: 10/31/2000

Cross-sectional Profile: 08/23/2000

Substrate and Cover: 08/23/2000

Horizontal Survey: 03/20/2001

Reach Q measured at: WD – T3

Calibration Sets

Transect	Date	LOW		Date	MED.		Date	HIGH	
		WSL (ft)	Reach Q (cfs)		WSL (ft)	Reach Q (cfs)		WSL (ft)	Reach Q (cfs)
WD – T1	11/14/2000	95.40	195	08/23/2000	95.38	218	05/07/2002	95.88	654
WD – T2	11/14/2000	95.91	195	08/23/2000	95.88	218	05/06/2002	96.45	696
WD – T3	11/14/2000	95.93	195	08/23/2000	95.91	218	05/06/2002	96.46	696

Table A – 1. Summer 1999 allocation scenario time series results for the riffle guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90WD	+ 1.00 WD
1-Jun	20374.50	20593.48	21414.11	21096.51	20418.76	19831.75	19538.25
2-Jun	20450.86	20374.93	21249.12	21187.25	20565.51	20125.26	19685.00
3-Jun	20833.08	20546.41	20374.93	21323.37	21051.14	20565.51	20272.01
4-Jun	20416.37	20737.52	20374.50	21368.74	21096.51	20712.27	20418.76
5-Jun	19582.96	20416.37	20546.41	21030.57	21232.63	21051.14	20712.27
6-Jun	18749.55	19999.67	20641.97	20812.02	21278.00	21096.51	20859.02
7-Jun	18332.84	19582.96	20833.08	20593.48	21323.37	21141.88	21051.14
8-Jun	17928.89	18749.55	20416.37	20374.93	21368.74	21187.25	21096.51
9-Jun	17526.36	18332.84	19999.67	20450.86	21414.11	21278.00	21141.88
10-Jun	16721.30	17928.89	19582.96	20546.41	21030.57	21323.37	21187.25
11-Jun	16721.30	17928.89	19166.25	20546.41	21030.57	21323.37	21232.63
12-Jun	16721.30	17526.36	19166.25	20641.97	21030.57	21323.37	21232.63
13-Jun	16335.06	17123.83	18749.55	20737.52	20812.02	21414.11	21278.00
14-Jun	15948.82	17123.83	18749.55	20737.52	20593.48	21414.11	21278.00
15-Jun	15948.82	16721.30	18332.84	20833.08	20374.93	21249.12	21323.37
16-Jun	15176.34	16335.06	17928.89	20416.37	20374.50	21030.57	21368.74
17-Jun	15562.58	16335.06	17928.89	20833.08	20374.93	21249.12	21368.74
18-Jun	15562.58	16721.30	18332.84	20833.08	20374.93	21249.12	21323.37
19-Jun	15562.58	16721.30	18332.84	20833.08	20374.93	21249.12	21323.37
20-Jun	15948.82	16721.30	18332.84	20833.08	20374.93	21249.12	21323.37
21-Jun	15562.58	16721.30	18332.84	20833.08	20374.93	21249.12	21323.37
22-Jun	15562.58	16335.06	17928.89	20416.37	20374.93	21249.12	21368.74
23-Jun	15176.34	16335.06	17526.36	20416.37	20374.50	21030.57	21414.11
24-Jun	14790.10	15948.82	17526.36	19999.67	20450.86	20812.02	21414.11
25-Jun	14790.10	15562.58	17123.83	19582.96	20450.86	20593.48	21249.12
26-Jun	14403.86	15562.58	16721.30	19582.96	20546.41	20593.48	21030.57
27-Jun	14017.62	15176.34	16721.30	19166.25	20641.97	20374.93	21030.57
28-Jun	13696.17	14403.86	15948.82	18332.84	20737.52	20374.50	20593.48
29-Jun	13696.17	14403.86	15948.82	18332.84	20737.52	20450.86	20593.48
30-Jun	13439.51	14403.86	15948.82	18332.84	20833.08	20450.86	20593.48
1-Jul	13696.17	14403.86	15948.82	18332.84	20737.52	20374.50	20593.48
2-Jul	13696.17	14790.10	15948.82	18749.55	20737.52	20374.50	20593.48
3-Jul	13696.17	14403.86	15948.82	18332.84	20737.52	20374.50	20593.48
4-Jul	13439.51	14403.86	15948.82	18332.84	20833.08	20450.86	20593.48
5-Jul	13439.51	14403.86	15562.58	18332.84	20833.08	20450.86	20374.93
6-Jul	13439.51	14017.62	15562.58	17928.89	20833.08	20546.41	20374.93
7-Jul	13182.85	14017.62	15562.58	17928.89	20416.37	20546.41	20374.93
8-Jul	13182.85	14017.62	15176.34	17928.89	20416.37	20546.41	20374.50
9-Jul	13182.85	13696.17	15176.34	17526.36	20416.37	20546.41	20374.50
10-Jul	13182.85	13696.17	15176.34	17526.36	20416.37	20641.97	20374.50
11-Jul	13182.85	13696.17	15176.34	17526.36	20416.37	20546.41	20374.50
12-Jul	13182.85	13696.17	15176.34	17526.36	20416.37	20641.97	20374.50
13-Jul	13182.85	14017.62	15176.34	17928.89	20416.37	20546.41	20374.50
14-Jul	13182.85	13696.17	15176.34	17928.89	20416.37	20546.41	20374.50

Table A1, continued. Summer 1999 allocation scenario time series results for the riffle guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90WD	+ 1.00 WD
15-Jul	13182.85	13696.17	15176.34	17526.36	20416.37	20641.97	20374.50
16-Jul	13182.85	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
17-Jul	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
18-Jul	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
19-Jul	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
20-Jul	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
21-Jul	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
22-Jul	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
23-Jul	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
24-Jul	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
25-Jul	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
26-Jul	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
27-Jul	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20450.86
28-Jul	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
29-Jul	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
30-Jul	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
31-Jul	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
1-Aug	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
2-Aug	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20450.86
3-Aug	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
4-Aug	12445.77	13696.17	14790.10	17526.36	19999.67	20641.97	20450.86
5-Aug	12445.77	13696.17	14790.10	17526.36	19999.67	20641.97	20450.86
6-Aug	12445.77	13696.17	14790.10	17526.36	19999.67	20641.97	20450.86
7-Aug	12445.77	13696.17	14790.10	17526.36	19999.67	20641.97	20450.86
8-Aug	12445.77	13696.17	14790.10	17526.36	19999.67	20641.97	20450.86
9-Aug	12445.77	13696.17	14790.10	17526.36	19999.67	20641.97	20450.86
10-Aug	12445.77	13696.17	14790.10	17526.36	19999.67	20641.97	20450.86
11-Aug	12445.77	13696.17	14790.10	17526.36	19999.67	20641.97	20450.86
12-Aug	12445.77	13696.17	14790.10	17526.36	19999.67	20641.97	20450.86
13-Aug	12445.77	13696.17	14790.10	17526.36	19999.67	20641.97	20450.86
14-Aug	13182.85	13696.17	15176.34	17526.36	20416.37	20546.41	20374.50
15-Aug	12445.77	13696.17	15176.34	17526.36	19999.67	20641.97	20374.50
16-Aug	12445.77	13696.17	14790.10	17526.36	19999.67	20641.97	20450.86
17-Aug	12445.77	13696.17	14790.10	17526.36	19999.67	20641.97	20450.86
18-Aug	12445.77	13696.17	14790.10	17526.36	19999.67	20641.97	20450.86
19-Aug	19999.67	20833.08	20450.86	21249.12	21141.88	21005.77	20565.51
20-Aug	19489.57	19343.51	19148.78	19151.57	19301.82	19177.64	19084.51
21-Aug	19101.49	19176.62	19251.74	19146.60	18887.87	18200.01	17719.16
22-Aug	20833.08	20546.41	20374.93	21323.37	21051.14	20565.51	20272.01
23-Aug	17928.89	18749.55	20416.37	20374.93	21368.74	21187.25	21096.51
24-Aug	17123.83	17928.89	19582.96	20546.41	21030.57	21323.37	21187.25
25-Aug	19239.73	19177.64	19053.47	18440.43	16997.88	16997.88	16997.88
26-Aug	19115.56	19022.43	18680.86	17238.31	16997.88	16997.88	16425.92
27-Aug	19239.73	19177.64	19053.47	18440.43	16997.88	16997.88	16997.88

Table A1, continued. Summer 1999 allocation scenario time series results for the riffle guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Microhabitat Index						
	Site Q	+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90WD	+ 1.00 WD
28-Aug	20272.01	19831.75	19440.88	19148.78	19151.57	19251.74	19270.78
29-Aug	21323.37	21187.25	21005.77	20125.26	19440.88	19246.15	19100.09
30-Aug	20593.48	21249.12	21278.00	21005.77	20125.26	19538.25	19392.20
31-Aug	20641.97	20374.50	21030.57	21232.63	20859.02	20272.01	19831.75
1-Sep	20833.08	20546.41	20374.93	21323.37	21051.14	20565.51	20272.01
2-Sep	19999.67	20833.08	20450.86	21249.12	21141.88	21005.77	20565.51
3-Sep	18749.55	19999.67	20641.97	20812.02	21278.00	21096.51	20859.02
4-Sep	18749.55	19999.67	20641.97	20812.02	21278.00	21096.51	20859.02
5-Sep	1769.01	1746.03	1715.39	1669.43	1622.04	1588.55	1563.43
6-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	487.91	471.97	450.71	418.83	386.94	365.69	349.74
9-Sep	3551.53	3475.08	3398.63	3220.24	3067.34	2965.40	2914.44
10-Sep	6862.76	6784.81	6628.93	6356.13	6122.29	5966.41	5888.46
11-Sep	12620.77	12332.37	12075.98	11477.74	10682.10	10151.67	9949.13
12-Sep	16725.51	16276.12	15676.93	15031.46	14639.31	14386.00	14198.04
13-Sep	19146.60	19053.47	18784.37	17478.73	16997.88	16997.88	16725.51
14-Sep	19051.41	19101.49	19201.66	19239.73	19022.43	18784.37	18200.01
15-Sep	19440.88	19294.83	19100.09	19176.62	19270.78	19146.60	19053.47
16-Sep	17719.16	16997.88	16997.88	16725.51	15826.73	15227.54	15096.82
17-Sep	16997.88	16997.88	16425.92	15527.13	14900.75	14704.67	14511.30
18-Sep	16997.88	16997.88	16575.71	15676.93	15031.46	14770.03	14573.95
19-Sep	18887.87	18440.43	17478.73	16997.88	16725.51	16126.32	15826.73
20-Sep	18887.87	18440.43	17478.73	16997.88	16725.51	16126.32	15826.73
21-Sep	9004.76	8870.52	8736.28	8423.07	8154.60	7975.62	7886.13
22-Sep	5888.46	5771.55	5654.63	5381.83	5148.00	4992.11	4927.66
23-Sep	8646.79	8512.56	8333.58	8065.11	7796.63	7617.65	7483.42
24-Sep	13751.32	13620.57	13359.07	12813.03	12161.44	11905.05	11648.67
25-Sep	16997.88	16725.51	16126.32	15162.18	14770.03	14511.30	14386.00
26-Sep	19146.60	19053.47	18784.37	17478.73	16997.88	16997.88	16725.51
27-Sep	19076.45	19126.53	19226.70	19208.69	18991.38	18440.43	17959.58
28-Sep	19148.78	19076.45	19176.62	19270.78	19084.51	18887.87	18440.43
29-Sep	19101.49	19176.62	19251.74	19146.60	18887.87	18200.01	17719.16
30-Sep	774.88	758.94	737.68	705.79	673.91	652.65	636.71

Table A2. Summer 1999 allocation scenario time series results for the fast generalist guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	19675.40	19913.71	20823.61	21703.09	22253.02	22551.67	22700.99
2-Jun	19497.10	19684.85	20600.30	21451.81	22178.36	22402.34	22626.33
3-Jun	18615.04	19276.58	19684.85	21074.89	21828.73	22178.36	22327.68
4-Jun	18307.63	18835.55	19675.40	20949.25	21703.09	22103.69	22253.02
5-Jun	17692.80	18307.63	19276.58	20371.44	21326.17	21828.73	22103.69
6-Jun	17077.97	18000.21	19056.07	20142.57	21200.53	21703.09	22029.03
7-Jun	16770.56	17692.80	18615.04	19913.71	21074.89	21577.45	21828.73
8-Jun	16516.62	17077.97	18307.63	19684.85	20949.25	21451.81	21703.09
9-Jun	16268.62	16770.56	18000.21	19497.10	20823.61	21200.53	21577.45
10-Jun	15772.61	16516.62	17692.80	19276.58	20371.44	21074.89	21451.81
11-Jun	15772.61	16516.62	17385.39	19276.58	20371.44	21074.89	21326.17
12-Jun	15772.61	16268.62	17385.39	19056.07	20371.44	21074.89	21326.17
13-Jun	15311.74	16020.61	17077.97	18835.55	20142.57	20823.61	21200.53
14-Jun	14850.87	16020.61	17077.97	18835.55	19913.71	20823.61	21200.53
15-Jun	14850.87	15772.61	16770.56	18615.04	19684.85	20600.30	21074.89
16-Jun	13929.13	15311.74	16516.62	18307.63	19675.40	20371.44	20949.25
17-Jun	14390.00	15311.74	16516.62	18615.04	19684.85	20600.30	20949.25
18-Jun	14390.00	15772.61	16770.56	18615.04	19684.85	20600.30	21074.89
19-Jun	14390.00	15772.61	16770.56	18615.04	19684.85	20600.30	21074.89
20-Jun	14850.87	15772.61	16770.56	18615.04	19684.85	20600.30	21074.89
21-Jun	14390.00	15772.61	16770.56	18615.04	19684.85	20600.30	21074.89
22-Jun	14390.00	15311.74	16516.62	18307.63	19684.85	20600.30	20949.25
23-Jun	13929.13	15311.74	16268.62	18307.63	19675.40	20371.44	20823.61
24-Jun	13468.26	14850.87	16268.62	18000.21	19497.10	20142.57	20823.61
25-Jun	13468.26	14390.00	16020.61	17692.80	19497.10	19913.71	20600.30
26-Jun	13007.39	14390.00	15772.61	17692.80	19276.58	19913.71	20371.44
27-Jun	12546.52	13929.13	15772.61	17385.39	19056.07	19684.85	20371.44
28-Jun	12014.83	13007.39	14850.87	16770.56	18835.55	19675.40	19913.71
29-Jun	12014.83	13007.39	14850.87	16770.56	18835.55	19497.10	19913.71
30-Jun	11412.33	13007.39	14850.87	16770.56	18615.04	19497.10	19913.71
1-Jul	12014.83	13007.39	14850.87	16770.56	18835.55	19675.40	19913.71
2-Jul	12014.83	13468.26	14850.87	17077.97	18835.55	19675.40	19913.71
3-Jul	12014.83	13007.39	14850.87	16770.56	18835.55	19675.40	19913.71
4-Jul	11412.33	13007.39	14850.87	16770.56	18615.04	19497.10	19913.71
5-Jul	11412.33	13007.39	14390.00	16770.56	18615.04	19497.10	19684.85
6-Jul	11412.33	12546.52	14390.00	16516.62	18615.04	19276.58	19684.85
7-Jul	10809.83	12546.52	14390.00	16516.62	18307.63	19276.58	19684.85
8-Jul	10809.83	12546.52	13929.13	16516.62	18307.63	19276.58	19675.40
9-Jul	10809.83	12014.83	13929.13	16268.62	18307.63	19276.58	19675.40
10-Jul	10809.83	12014.83	13929.13	16268.62	18307.63	19056.07	19675.40
11-Jul	10809.83	12014.83	13929.13	16268.62	18307.63	19276.58	19675.40
12-Jul	10809.83	12014.83	13929.13	16268.62	18307.63	19056.07	19675.40
13-Jul	10809.83	12546.52	13929.13	16516.62	18307.63	19276.58	19675.40
14-Jul	10809.83	12014.83	13929.13	16516.62	18307.63	19276.58	19675.40

Table A2, continued. Summer 1999 allocation scenario time series results for the fast generalist guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	10809.83	12014.83	13929.13	16268.62	18307.63	19056.07	19675.40
16-Jul	10809.83	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
17-Jul	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
18-Jul	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
19-Jul	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
20-Jul	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
21-Jul	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
22-Jul	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
23-Jul	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
24-Jul	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
25-Jul	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
26-Jul	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
27-Jul	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19497.10
28-Jul	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
29-Jul	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
30-Jul	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
31-Jul	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
1-Aug	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
2-Aug	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19497.10
3-Aug	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
4-Aug	10388.90	12014.83	13468.26	16268.62	18000.21	19056.07	19497.10
5-Aug	10388.90	12014.83	13468.26	16268.62	18000.21	19056.07	19497.10
6-Aug	10388.90	12014.83	13468.26	16268.62	18000.21	19056.07	19497.10
7-Aug	10388.90	12014.83	13468.26	16268.62	18000.21	19056.07	19497.10
8-Aug	10388.90	12014.83	13468.26	16268.62	18000.21	19056.07	19497.10
9-Aug	10388.90	12014.83	13468.26	16268.62	18000.21	19056.07	19497.10
10-Aug	10388.90	12014.83	13468.26	16268.62	18000.21	19056.07	19497.10
11-Aug	10388.90	12014.83	13468.26	16268.62	18000.21	19056.07	19497.10
12-Aug	10388.90	12014.83	13468.26	16268.62	18000.21	19056.07	19497.10
13-Aug	10388.90	12014.83	13468.26	16268.62	18000.21	19056.07	19497.10
14-Aug	10809.83	12014.83	13929.13	16268.62	18307.63	19276.58	19675.40
15-Aug	10388.90	12014.83	13929.13	16268.62	18000.21	19056.07	19675.40
16-Aug	10388.90	12014.83	13468.26	16268.62	18000.21	19056.07	19497.10
17-Aug	10388.90	12014.83	13468.26	16268.62	18000.21	19056.07	19497.10
18-Aug	10388.90	12014.83	13468.26	16268.62	18000.21	19056.07	19497.10
19-Aug	18000.21	18615.04	19497.10	20600.30	21577.45	21954.37	22178.36
20-Aug	22791.93	23064.73	23428.47	23752.80	23966.49	24042.19	24098.96
21-Aug	23681.57	23788.41	23895.26	24061.12	24201.18	24303.57	24315.08
22-Aug	18615.04	19276.58	19684.85	21074.89	21828.73	22178.36	22327.68
23-Aug	16516.62	17077.97	18307.63	19684.85	20949.25	21451.81	21703.09
24-Aug	16020.61	16516.62	17692.80	19276.58	20371.44	21074.89	21451.81
25-Aug	24004.34	24042.19	24117.89	24297.81	24187.12	23751.39	23315.66
26-Aug	24080.04	24136.81	24292.05	24326.60	23606.14	23025.17	22150.47
27-Aug	24004.34	24042.19	24117.89	24297.81	24187.12	23751.39	23315.66

Table A2, continued. Summer 1999 allocation scenario time series results for the fast generalist guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Microhabitat Index						
	Site Q	+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	22327.68	22551.67	22882.86	23428.47	23752.80	23895.26	23985.42
29-Aug	21074.89	21451.81	21954.37	22402.34	22882.86	23246.60	23519.40
30-Aug	19913.71	20600.30	21200.53	21954.37	22402.34	22700.99	22973.79
31-Aug	19056.07	19675.40	20371.44	21326.17	22029.03	22327.68	22551.67
1-Sep	18615.04	19276.58	19684.85	21074.89	21828.73	22178.36	22327.68
2-Sep	18000.21	18615.04	19497.10	20600.30	21577.45	21954.37	22178.36
3-Sep	17077.97	18000.21	19056.07	20142.57	21200.53	21703.09	22029.03
4-Sep	17077.97	18000.21	19056.07	20142.57	21200.53	21703.09	22029.03
5-Sep	2509.17	2432.88	2331.15	2178.57	2058.19	2020.87	1992.88
6-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	703.41	681.01	651.15	606.35	561.56	531.70	509.30
9-Sep	6546.40	6417.96	6289.53	5989.85	5732.98	5561.74	5476.12
10-Sep	12723.44	12567.42	12255.39	11709.33	11241.28	10929.24	10773.23
11-Sep	18582.57	18284.33	18033.48	17448.17	17446.03	17444.60	17185.19
12-Sep	22589.37	21931.02	21053.22	20394.87	20394.87	20162.04	19929.20
13-Sep	24061.12	24117.89	24246.61	24320.84	23751.39	23170.41	22589.37
14-Sep	23610.34	23681.57	23824.03	24004.34	24136.81	24246.61	24303.57
15-Sep	22882.86	23155.66	23519.40	23788.41	23985.42	24061.12	24117.89
16-Sep	24315.08	24332.36	23896.63	22589.37	21272.67	20394.87	20394.87
17-Sep	23460.90	23170.41	22150.47	20833.77	20394.87	20394.87	20317.26
18-Sep	23751.39	23315.66	22369.92	21053.22	20394.87	20394.87	20394.87
19-Sep	24201.18	24297.81	24320.84	23751.39	22589.37	21711.57	21272.67
20-Sep	24201.18	24297.81	24320.84	23751.39	22589.37	21711.57	21272.67
21-Sep	15946.77	15746.01	15545.24	15076.79	14675.26	14407.57	14273.73
22-Sep	10773.23	10539.20	10305.17	9759.11	9291.06	8979.03	8858.21
23-Sep	15411.40	15210.63	14942.95	14541.42	14139.89	13872.20	13671.43
24-Sep	19516.67	19448.61	19312.48	18781.39	18117.10	17866.25	17615.40
25-Sep	23170.41	22589.37	21711.57	20394.87	20394.87	20317.26	20162.04
26-Sep	24061.12	24117.89	24246.61	24320.84	23751.39	23170.41	22589.37
27-Sep	23645.96	23717.19	23859.64	24023.27	24155.74	24297.81	24309.33
28-Sep	23428.47	23645.96	23788.41	23985.42	24098.96	24201.18	24297.81
29-Sep	23681.57	23788.41	23895.26	24061.12	24201.18	24303.57	24315.08
30-Sep	1106.54	1084.15	1054.28	1009.49	964.70	934.84	912.44

Table A3. Summer 1999 allocation scenario time series results for the pool - run guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Microhabitat Index						
	Site Q	+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	15000.32	15082.27	15438.99	15756.99	16096.96	16346.07	16470.62
2-Jun	14865.29	15000.76	15326.80	15666.13	16034.68	16221.51	16408.34
3-Jun	14190.61	14696.62	15000.76	15529.85	15802.42	16034.68	16159.23
4-Jun	14039.25	14359.28	15000.32	15484.42	15756.99	15972.40	16096.96
5-Jun	13736.53	14039.25	14696.62	15245.29	15620.71	15802.42	15972.40
6-Jun	13433.81	13887.89	14527.95	15163.78	15575.28	15756.99	15910.13
7-Jun	13282.45	13736.53	14190.61	15082.27	15529.85	15711.56	15802.42
8-Jun	13123.67	13433.81	14039.25	15000.76	15484.42	15666.13	15756.99
9-Jun	12964.08	13282.45	13887.89	14865.29	15438.99	15575.28	15711.56
10-Jun	12644.89	13123.67	13736.53	14696.62	15245.29	15529.85	15666.13
11-Jun	12644.89	13123.67	13585.17	14696.62	15245.29	15529.85	15620.71
12-Jun	12644.89	12964.08	13585.17	14527.95	15245.29	15529.85	15620.71
13-Jun	12343.68	12804.48	13433.81	14359.28	15163.78	15438.99	15575.28
14-Jun	12042.47	12804.48	13433.81	14359.28	15082.27	15438.99	15575.28
15-Jun	12042.47	12644.89	13282.45	14190.61	15000.76	15326.80	15529.85
16-Jun	11440.05	12343.68	13123.67	14039.25	15000.32	15245.29	15484.42
17-Jun	11741.26	12343.68	13123.67	14190.61	15000.76	15326.80	15484.42
18-Jun	11741.26	12644.89	13282.45	14190.61	15000.76	15326.80	15529.85
19-Jun	11741.26	12644.89	13282.45	14190.61	15000.76	15326.80	15529.85
20-Jun	12042.47	12644.89	13282.45	14190.61	15000.76	15326.80	15529.85
21-Jun	11741.26	12644.89	13282.45	14190.61	15000.76	15326.80	15529.85
22-Jun	11741.26	12343.68	13123.67	14039.25	15000.76	15326.80	15484.42
23-Jun	11440.05	12343.68	12964.08	14039.25	15000.32	15245.29	15438.99
24-Jun	11138.84	12042.47	12964.08	13887.89	14865.29	15163.78	15438.99
25-Jun	11138.84	11741.26	12804.48	13736.53	14865.29	15082.27	15326.80
26-Jun	10837.63	11741.26	12644.89	13736.53	14696.62	15082.27	15245.29
27-Jun	10536.42	11440.05	12644.89	13585.17	14527.95	15000.76	15245.29
28-Jun	10255.11	10837.63	12042.47	13282.45	14359.28	15000.32	15082.27
29-Jun	10255.11	10837.63	12042.47	13282.45	14359.28	14865.29	15082.27
30-Jun	9993.70	10837.63	12042.47	13282.45	14190.61	14865.29	15082.27
1-Jul	10255.11	10837.63	12042.47	13282.45	14359.28	15000.32	15082.27
2-Jul	10255.11	11138.84	12042.47	13433.81	14359.28	15000.32	15082.27
3-Jul	10255.11	10837.63	12042.47	13282.45	14359.28	15000.32	15082.27
4-Jul	9993.70	10837.63	12042.47	13282.45	14190.61	14865.29	15082.27
5-Jul	9993.70	10837.63	11741.26	13282.45	14190.61	14865.29	15000.76
6-Jul	9993.70	10536.42	11741.26	13123.67	14190.61	14696.62	15000.76
7-Jul	9732.29	10536.42	11741.26	13123.67	14039.25	14696.62	15000.76
8-Jul	9732.29	10536.42	11440.05	13123.67	14039.25	14696.62	15000.32
9-Jul	9732.29	10255.11	11440.05	12964.08	14039.25	14696.62	15000.32
10-Jul	9732.29	10255.11	11440.05	12964.08	14039.25	14527.95	15000.32
11-Jul	9732.29	10255.11	11440.05	12964.08	14039.25	14696.62	15000.32
12-Jul	9732.29	10255.11	11440.05	12964.08	14039.25	14527.95	15000.32
13-Jul	9732.29	10536.42	11440.05	13123.67	14039.25	14696.62	15000.32

Table A3, continued. Summer 1999 allocation scenario time series results for the pool - run guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
14-Jul	9732.29	10255.11	11440.05	13123.67	14039.25	14696.62	15000.32
15-Jul	9732.29	10255.11	11440.05	12964.08	14039.25	14527.95	15000.32
16-Jul	9732.29	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
17-Jul	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
18-Jul	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
19-Jul	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
20-Jul	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
21-Jul	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
22-Jul	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
23-Jul	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
24-Jul	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
25-Jul	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
26-Jul	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
27-Jul	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	14865.29
28-Jul	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
29-Jul	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
30-Jul	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
31-Jul	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
1-Aug	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
2-Aug	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	14865.29
3-Aug	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
4-Aug	9466.07	10255.11	11138.84	12964.08	13887.89	14527.95	14865.29
5-Aug	9466.07	10255.11	11138.84	12964.08	13887.89	14527.95	14865.29
6-Aug	9466.07	10255.11	11138.84	12964.08	13887.89	14527.95	14865.29
7-Aug	9466.07	10255.11	11138.84	12964.08	13887.89	14527.95	14865.29
8-Aug	9466.07	10255.11	11138.84	12964.08	13887.89	14527.95	14865.29
9-Aug	9466.07	10255.11	11138.84	12964.08	13887.89	14527.95	14865.29
10-Aug	9466.07	10255.11	11138.84	12964.08	13887.89	14527.95	14865.29
11-Aug	9466.07	10255.11	11138.84	12964.08	13887.89	14527.95	14865.29
12-Aug	9466.07	10255.11	11138.84	12964.08	13887.89	14527.95	14865.29
13-Aug	9466.07	10255.11	11138.84	12964.08	13887.89	14527.95	14865.29
14-Aug	9732.29	10255.11	11440.05	12964.08	14039.25	14696.62	15000.32
15-Aug	9466.07	10255.11	11440.05	12964.08	13887.89	14527.95	15000.32
16-Aug	9466.07	10255.11	11138.84	12964.08	13887.89	14527.95	14865.29
17-Aug	9466.07	10255.11	11138.84	12964.08	13887.89	14527.95	14865.29
18-Aug	9466.07	10255.11	11138.84	12964.08	13887.89	14527.95	14865.29
19-Aug	13887.89	14190.61	14865.29	15326.80	15711.56	15847.85	16034.68
20-Aug	16511.29	16633.32	16796.03	16900.34	16934.77	16914.01	16898.43
21-Aug	16888.86	16906.07	16923.29	16908.81	16834.82	16782.38	16826.03
22-Aug	14190.61	14696.62	15000.76	15529.85	15802.42	16034.68	16159.23
23-Aug	13123.67	13433.81	14039.25	15000.76	15484.42	15666.13	15756.99
24-Aug	12804.48	13123.67	13736.53	14696.62	15245.29	15529.85	15666.13
25-Aug	16924.39	16914.01	16893.24	16760.56	16702.39	16135.03	15567.67
26-Aug	16903.62	16888.05	16738.73	16869.68	15945.91	15189.43	14838.14

Table A3, continued. Summer 1999 allocation scenario time series results for the pool - run guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
27-Aug	16924.39	16914.01	16893.24	16760.56	16702.39	16135.03	15567.67
28-Aug	16159.23	16346.07	16551.97	16796.03	16900.34	16923.29	16929.58
29-Aug	15529.85	15666.13	15847.85	16221.51	16551.97	16714.68	16836.71
30-Aug	15082.27	15326.80	15575.28	15847.85	16221.51	16470.62	16592.65
31-Aug	14527.95	15000.32	15245.29	15620.71	15910.13	16159.23	16346.07
1-Sep	14190.61	14696.62	15000.76	15529.85	15802.42	16034.68	16159.23
2-Sep	13887.89	14190.61	14865.29	15326.80	15711.56	15847.85	16034.68
3-Sep	13433.81	13887.89	14527.95	15163.78	15575.28	15756.99	15910.13
4-Sep	13433.81	13887.89	14527.95	15163.78	15575.28	15756.99	15910.13
5-Sep	2888.16	2838.58	2772.48	2673.33	2586.84	2546.06	2515.48
6-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	1110.50	1086.23	1053.87	1005.34	956.80	924.45	900.18
9-Sep	5714.49	5617.51	5520.53	5294.24	5100.27	4970.96	4906.31
10-Sep	10013.70	9910.79	9704.98	9344.81	9036.09	8830.28	8727.37
11-Sep	13416.31	13412.20	13386.08	13325.14	12998.36	12780.50	12717.34
12-Sep	14930.73	14791.85	14606.68	14467.80	14467.80	14312.58	14157.36
13-Sep	16908.81	16893.24	16786.77	16847.86	16135.03	15378.55	14930.73
14-Sep	16877.38	16888.86	16911.81	16924.39	16888.05	16786.77	16782.38
15-Sep	16551.97	16674.00	16836.71	16906.07	16929.58	16908.81	16893.24
16-Sep	16826.03	16891.51	16324.15	14930.73	14652.97	14467.80	14467.80
17-Sep	15756.79	15378.55	14838.14	14560.39	14467.80	14467.80	14416.06
18-Sep	16135.03	15567.67	14884.44	14606.68	14467.80	14467.80	14467.80
19-Sep	16834.82	16760.56	16847.86	16135.03	14930.73	14745.56	14652.97
20-Sep	16834.82	16760.56	16847.86	16135.03	14930.73	14745.56	14652.97
21-Sep	12320.75	12176.77	12032.80	11696.86	11408.91	11216.94	11120.96
22-Sep	8727.37	8573.01	8418.65	8058.48	7749.77	7543.95	7460.17
23-Sep	11936.81	11792.84	11600.88	11312.93	11024.98	10833.01	10689.04
24-Sep	13793.05	13688.15	13478.35	13419.05	13394.79	13368.67	13342.55
25-Sep	15378.55	14930.73	14745.56	14467.80	14467.80	14416.06	14312.58
26-Sep	16908.81	16893.24	16786.77	16847.86	16135.03	15378.55	14930.73
27-Sep	16883.12	16894.60	16917.55	16919.20	16882.86	16760.56	16804.21
28-Sep	16796.03	16883.12	16906.07	16929.58	16898.43	16834.82	16760.56
29-Sep	16888.86	16906.07	16923.29	16908.81	16834.82	16782.38	16826.03
30-Sep	1547.31	1523.05	1490.69	1442.15	1393.62	1361.26	1337.00

Table A4. Summer 1999 allocation scenario time series results for the pool - cover guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	7959.83	8104.75	8589.21	8740.57	8659.68	8535.55	8473.49
2-Jun	7914.80	8019.06	8361.83	8697.32	8690.71	8597.62	8504.52
3-Jun	7748.91	7873.33	8019.06	8632.45	8762.19	8690.71	8628.65
4-Jun	7633.11	7790.38	7959.83	8610.83	8740.57	8721.75	8659.68
5-Jun	7401.52	7633.11	7873.33	8276.14	8675.70	8762.19	8721.75
6-Jun	7169.92	7517.31	7831.86	8190.45	8654.08	8740.57	8752.78
7-Jun	7054.12	7401.52	7748.91	8104.75	8632.45	8718.94	8762.19
8-Jun	6829.37	7169.92	7633.11	8019.06	8610.83	8697.32	8740.57
9-Jun	6592.51	7054.12	7517.31	7914.80	8589.21	8654.08	8718.94
10-Jun	6118.80	6829.37	7401.52	7873.33	8276.14	8632.45	8697.32
11-Jun	6118.80	6829.37	7285.72	7873.33	8276.14	8632.45	8675.70
12-Jun	6118.80	6592.51	7285.72	7831.86	8276.14	8632.45	8675.70
13-Jun	5997.46	6355.66	7169.92	7790.38	8190.45	8589.21	8654.08
14-Jun	5876.13	6355.66	7169.92	7790.38	8104.75	8589.21	8654.08
15-Jun	5876.13	6118.80	7054.12	7748.91	8019.06	8361.83	8632.45
16-Jun	5633.46	5997.46	6829.37	7633.11	7959.83	8276.14	8610.83
17-Jun	5754.79	5997.46	6829.37	7748.91	8019.06	8361.83	8610.83
18-Jun	5754.79	6118.80	7054.12	7748.91	8019.06	8361.83	8632.45
19-Jun	5754.79	6118.80	7054.12	7748.91	8019.06	8361.83	8632.45
20-Jun	5876.13	6118.80	7054.12	7748.91	8019.06	8361.83	8632.45
21-Jun	5754.79	6118.80	7054.12	7748.91	8019.06	8361.83	8632.45
22-Jun	5754.79	5997.46	6829.37	7633.11	8019.06	8361.83	8610.83
23-Jun	5633.46	5997.46	6592.51	7633.11	7959.83	8276.14	8589.21
24-Jun	5512.12	5876.13	6592.51	7517.31	7914.80	8190.45	8589.21
25-Jun	5512.12	5754.79	6355.66	7401.52	7914.80	8104.75	8361.83
26-Jun	5390.78	5754.79	6118.80	7401.52	7873.33	8104.75	8276.14
27-Jun	5269.45	5633.46	6118.80	7285.72	7831.86	8019.06	8276.14
28-Jun	5165.51	5390.78	5876.13	7054.12	7790.38	7959.83	8104.75
29-Jun	5165.51	5390.78	5876.13	7054.12	7790.38	7914.80	8104.75
30-Jun	5078.96	5390.78	5876.13	7054.12	7748.91	7914.80	8104.75
1-Jul	5165.51	5390.78	5876.13	7054.12	7790.38	7959.83	8104.75
2-Jul	5165.51	5512.12	5876.13	7169.92	7790.38	7959.83	8104.75
3-Jul	5165.51	5390.78	5876.13	7054.12	7790.38	7959.83	8104.75
4-Jul	5078.96	5390.78	5876.13	7054.12	7748.91	7914.80	8104.75
5-Jul	5078.96	5390.78	5754.79	7054.12	7748.91	7914.80	8019.06
6-Jul	5078.96	5269.45	5754.79	6829.37	7748.91	7873.33	8019.06
7-Jul	4992.41	5269.45	5754.79	6829.37	7633.11	7873.33	8019.06
8-Jul	4992.41	5269.45	5633.46	6829.37	7633.11	7873.33	7959.83
9-Jul	4992.41	5165.51	5633.46	6592.51	7633.11	7873.33	7959.83
10-Jul	4992.41	5165.51	5633.46	6592.51	7633.11	7831.86	7959.83
11-Jul	4992.41	5165.51	5633.46	6592.51	7633.11	7873.33	7959.83
12-Jul	4992.41	5165.51	5633.46	6592.51	7633.11	7831.86	7959.83
13-Jul	4992.41	5269.45	5633.46	6829.37	7633.11	7873.33	7959.83
14-Jul	4992.41	5165.51	5633.46	6829.37	7633.11	7873.33	7959.83

Table A4, continued. Summer 1999 allocation scenario time series results for the pool - cover guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	4992.41	5165.51	5633.46	6592.51	7633.11	7831.86	7959.83
16-Jul	4992.41	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
17-Jul	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
18-Jul	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
19-Jul	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
20-Jul	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
21-Jul	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
22-Jul	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
23-Jul	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
24-Jul	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
25-Jul	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
26-Jul	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
27-Jul	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7914.80
28-Jul	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
29-Jul	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
30-Jul	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
31-Jul	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
1-Aug	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
2-Aug	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7914.80
3-Aug	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
4-Aug	4777.52	5165.51	5512.12	6592.51	7517.31	7831.86	7914.80
5-Aug	4777.52	5165.51	5512.12	6592.51	7517.31	7831.86	7914.80
6-Aug	4777.52	5165.51	5512.12	6592.51	7517.31	7831.86	7914.80
7-Aug	4777.52	5165.51	5512.12	6592.51	7517.31	7831.86	7914.80
8-Aug	4777.52	5165.51	5512.12	6592.51	7517.31	7831.86	7914.80
9-Aug	4777.52	5165.51	5512.12	6592.51	7517.31	7831.86	7914.80
10-Aug	4777.52	5165.51	5512.12	6592.51	7517.31	7831.86	7914.80
11-Aug	4777.52	5165.51	5512.12	6592.51	7517.31	7831.86	7914.80
12-Aug	4777.52	5165.51	5512.12	6592.51	7517.31	7831.86	7914.80
13-Aug	4777.52	5165.51	5512.12	6592.51	7517.31	7831.86	7914.80
14-Aug	4992.41	5165.51	5633.46	6592.51	7633.11	7873.33	7959.83
15-Aug	4777.52	5165.51	5633.46	6592.51	7517.31	7831.86	7959.83
16-Aug	4777.52	5165.51	5512.12	6592.51	7517.31	7831.86	7914.80
17-Aug	4777.52	5165.51	5512.12	6592.51	7517.31	7831.86	7914.80
18-Aug	4777.52	5165.51	5512.12	6592.51	7517.31	7831.86	7914.80
19-Aug	7517.31	7748.91	7914.80	8361.83	8718.94	8783.81	8690.71
20-Aug	8481.10	8503.93	8534.38	8317.84	7970.21	7782.06	7640.95
21-Aug	8433.72	8259.90	8086.09	7735.03	7480.00	7436.09	7431.86
22-Aug	7748.91	7873.33	8019.06	8632.45	8762.19	8690.71	8628.65
23-Aug	6829.37	7169.92	7633.11	8019.06	8610.83	8697.32	8740.57
24-Aug	6355.66	6829.37	7401.52	7873.33	8276.14	8632.45	8697.32
25-Aug	7876.14	7782.06	7593.91	7438.21	7408.98	7359.43	7309.88
26-Aug	7687.99	7546.88	7440.33	7427.62	7342.91	7276.84	7255.14
27-Aug	7876.14	7782.06	7593.91	7438.21	7408.98	7359.43	7309.88

Table A4, continued. Summer 1999 allocation scenario time series results for the pool - cover guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	8628.65	8535.55	8488.71	8534.38	8317.84	8086.09	7923.17
29-Aug	8632.45	8697.32	8783.81	8597.62	8488.71	8519.16	8541.99
30-Aug	8104.75	8361.83	8654.08	8783.81	8597.62	8473.49	8496.32
31-Aug	7831.86	7959.83	8276.14	8675.70	8752.78	8628.65	8535.55
1-Sep	7748.91	7873.33	8019.06	8632.45	8762.19	8690.71	8628.65
2-Sep	7517.31	7748.91	7914.80	8361.83	8718.94	8783.81	8690.71
3-Sep	7169.92	7517.31	7831.86	8190.45	8654.08	8740.57	8752.78
4-Sep	7169.92	7517.31	7831.86	8190.45	8654.08	8740.57	8752.78
5-Sep	2289.66	2268.80	2240.99	2199.27	2166.62	2156.95	2149.69
6-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	1570.55	1552.30	1527.96	1491.45	1454.94	1430.60	1412.35
9-Sep	3394.27	3359.11	3323.94	3241.88	3171.55	3124.66	3101.21
10-Sep	4649.46	4624.55	4574.71	4487.51	4412.76	4362.92	4338.01
11-Sep	6152.76	6029.70	6033.96	6043.89	6036.97	6032.36	6044.68
12-Sep	7277.32	7244.05	7199.69	7193.91	7248.90	7160.97	7063.89
13-Sep	7735.03	7593.91	7460.17	7429.74	7359.43	7293.36	7277.32
14-Sep	8549.60	8433.72	8201.97	7876.14	7546.88	7460.17	7436.09
15-Sep	8488.71	8511.55	8541.99	8259.90	7923.17	7735.03	7593.91
16-Sep	7431.86	7425.50	7375.95	7277.32	7210.78	7166.42	7184.75
17-Sep	7326.39	7293.36	7255.14	7188.60	7212.24	7239.73	7225.70
18-Sep	7359.43	7309.88	7266.23	7199.69	7193.91	7230.57	7258.06
19-Sep	7480.00	7438.21	7429.74	7359.43	7277.32	7232.96	7210.78
20-Sep	7480.00	7438.21	7429.74	7359.43	7277.32	7232.96	7210.78
21-Sep	6008.03	5922.11	5836.19	5635.70	5463.86	5349.29	5292.01
22-Sep	4338.01	4300.63	4263.26	4176.05	4101.30	4051.47	4027.29
23-Sep	5778.90	5692.98	5578.42	5406.58	5234.73	5120.17	5034.25
24-Sep	6786.08	6687.17	6489.35	6234.80	6032.54	6036.80	6041.05
25-Sep	7293.36	7277.32	7232.96	7175.58	7230.57	7225.70	7160.97
26-Sep	7735.03	7593.91	7460.17	7429.74	7359.43	7293.36	7277.32
27-Sep	8491.66	8375.78	8144.03	7829.10	7499.84	7438.21	7433.97
28-Sep	8534.38	8491.66	8259.90	7923.17	7640.95	7480.00	7438.21
29-Sep	8433.72	8259.90	8086.09	7735.03	7480.00	7436.09	7431.86
30-Sep	1899.12	1880.86	1856.53	1820.02	1783.51	1759.17	1740.92

Table A – 5. Summer 1999 allocation scenario time series results for the algae – midge guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	7719.68	7165.48	6497.74	7331.13	8359.83	9150.42	9545.71
2-Jun	8231.77	7110.03	7331.81	7093.02	8162.18	8755.12	9348.06
3-Jun	10182.54	8719.46	7110.03	6735.85	7450.19	8162.18	8557.48
4-Jun	11026.83	9694.85	7719.68	6616.80	7331.13	7964.53	8359.83
5-Jun	12715.42	11026.83	8719.46	7276.37	6973.96	7450.19	7964.53
6-Jun	14404.01	11871.13	9207.15	7220.92	6854.91	7331.13	7766.89
7-Jun	15248.30	12715.42	10182.54	7165.48	6735.85	7212.07	7450.19
8-Jun	15923.48	14404.01	11026.83	7110.03	6616.80	7093.02	7331.13
9-Jun	16579.88	15248.30	11871.13	8231.77	6497.74	6854.91	7212.07
10-Jun	17892.66	15923.48	12715.42	8719.46	7276.37	6735.85	7093.02
11-Jun	17892.66	15923.48	13559.71	8719.46	7276.37	6735.85	6973.96
12-Jun	17892.66	16579.88	13559.71	9207.15	7276.37	6735.85	6973.96
13-Jun	17907.68	17236.27	14404.01	9694.85	7220.92	6497.74	6854.91
14-Jun	17922.70	17236.27	14404.01	9694.85	7165.48	6497.74	6854.91
15-Jun	17922.70	17892.66	15248.30	10182.54	7110.03	7331.81	6735.85
16-Jun	17952.75	17907.68	15923.48	11026.83	7719.68	7276.37	6616.80
17-Jun	17937.72	17907.68	15923.48	10182.54	7110.03	7331.81	6616.80
18-Jun	17937.72	17892.66	15248.30	10182.54	7110.03	7331.81	6735.85
19-Jun	17937.72	17892.66	15248.30	10182.54	7110.03	7331.81	6735.85
20-Jun	17922.70	17892.66	15248.30	10182.54	7110.03	7331.81	6735.85
21-Jun	17937.72	17892.66	15248.30	10182.54	7110.03	7331.81	6735.85
22-Jun	17937.72	17907.68	15923.48	11026.83	7110.03	7331.81	6616.80
23-Jun	17952.75	17907.68	16579.88	11026.83	7719.68	7276.37	6497.74
24-Jun	17967.77	17922.70	16579.88	11871.13	8231.77	7220.92	6497.74
25-Jun	17967.77	17937.72	17236.27	12715.42	8231.77	7165.48	7331.81
26-Jun	17982.79	17937.72	17892.66	12715.42	8719.46	7165.48	7276.37
27-Jun	17997.81	17952.75	17892.66	13559.71	9207.15	7110.03	7276.37
28-Jun	18282.76	17982.79	17922.70	15248.30	9694.85	7719.68	7165.48
29-Jun	18282.76	17982.79	17922.70	15248.30	9694.85	8231.77	7165.48
30-Jun	18837.63	17982.79	17922.70	15248.30	10182.54	8231.77	7165.48
1-Jul	18282.76	17982.79	17922.70	15248.30	9694.85	7719.68	7165.48
2-Jul	18282.76	17967.77	17922.70	14404.01	9694.85	7719.68	7165.48
3-Jul	18282.76	17982.79	17922.70	15248.30	9694.85	7719.68	7165.48
4-Jul	18837.63	17982.79	17922.70	15248.30	10182.54	8231.77	7165.48
5-Jul	18837.63	17982.79	17937.72	15248.30	10182.54	8231.77	7110.03
6-Jul	18837.63	17997.81	17937.72	15923.48	10182.54	8719.46	7110.03
7-Jul	19392.50	17997.81	17937.72	15923.48	11026.83	8719.46	7110.03
8-Jul	19392.50	17997.81	17952.75	15923.48	11026.83	8719.46	7719.68
9-Jul	19392.50	18282.76	17952.75	16579.88	11026.83	8719.46	7719.68
10-Jul	19392.50	18282.76	17952.75	16579.88	11026.83	9207.15	7719.68
11-Jul	19392.50	18282.76	17952.75	16579.88	11026.83	8719.46	7719.68
12-Jul	19392.50	18282.76	17952.75	16579.88	11026.83	9207.15	7719.68
13-Jul	19392.50	17997.81	17952.75	15923.48	11026.83	8719.46	7719.68
14-Jul	19392.50	18282.76	17952.75	15923.48	11026.83	8719.46	7719.68

Table A – 5, continued. Summer 1999 allocation scenario time series results for the algae – midge guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	19392.50	18282.76	17952.75	16579.88	11026.83	9207.15	7719.68
16-Jul	19392.50	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
17-Jul	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
18-Jul	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
19-Jul	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
20-Jul	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
21-Jul	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
22-Jul	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
23-Jul	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
24-Jul	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
25-Jul	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
26-Jul	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
27-Jul	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	8231.77
28-Jul	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
29-Jul	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
30-Jul	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
31-Jul	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
1-Aug	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
2-Aug	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	8231.77
3-Aug	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
4-Aug	20222.55	18282.76	17967.77	16579.88	11871.13	9207.15	8231.77
5-Aug	20222.55	18282.76	17967.77	16579.88	11871.13	9207.15	8231.77
6-Aug	20222.55	18282.76	17967.77	16579.88	11871.13	9207.15	8231.77
7-Aug	20222.55	18282.76	17967.77	16579.88	11871.13	9207.15	8231.77
8-Aug	20222.55	18282.76	17967.77	16579.88	11871.13	9207.15	8231.77
9-Aug	20222.55	18282.76	17967.77	16579.88	11871.13	9207.15	8231.77
10-Aug	20222.55	18282.76	17967.77	16579.88	11871.13	9207.15	8231.77
11-Aug	20222.55	18282.76	17967.77	16579.88	11871.13	9207.15	8231.77
12-Aug	20222.55	18282.76	17967.77	16579.88	11871.13	9207.15	8231.77
13-Aug	20222.55	18282.76	17967.77	16579.88	11871.13	9207.15	8231.77
14-Aug	19392.50	18282.76	17952.75	16579.88	11026.83	8719.46	7719.68
15-Aug	20222.55	18282.76	17952.75	16579.88	11871.13	9207.15	7719.68
16-Aug	20222.55	18282.76	17967.77	16579.88	11871.13	9207.15	8231.77
17-Aug	20222.55	18282.76	17967.77	16579.88	11871.13	9207.15	8231.77
18-Aug	20222.55	18282.76	17967.77	16579.88	11871.13	9207.15	8231.77
19-Aug	11871.13	10182.54	8231.77	7331.81	7212.07	7569.24	8162.18
20-Aug	9136.15	7907.49	6269.26	5115.60	4613.77	4677.36	4725.06
21-Aug	5282.87	5031.96	4781.05	4693.26	4775.36	4803.43	4826.29
22-Aug	10182.54	8719.46	7110.03	6735.85	7450.19	8162.18	8557.48
23-Aug	15923.48	14404.01	11026.83	7110.03	6616.80	7093.02	7331.13
24-Aug	17236.27	15923.48	12715.42	8719.46	7276.37	6735.85	7093.02
25-Aug	4645.57	4677.36	4740.95	4792.01	4777.25	4527.31	4277.36
26-Aug	4709.16	4756.85	4780.58	4849.14	4443.99	4110.73	4246.86
27-Aug	4645.57	4677.36	4740.95	4792.01	4777.25	4527.31	4277.36

Table A – 5, continued. Summer 1999 allocation scenario time series results for the algae – midge guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	8557.48	9150.42	8726.60	6269.26	5115.60	4781.05	4629.67
29-Aug	6735.85	7093.02	7569.24	8755.12	8726.60	7088.37	5859.71
30-Aug	7165.48	7331.81	6854.91	7569.24	8755.12	9545.71	8317.04
31-Aug	9207.15	7719.68	7276.37	6973.96	7766.89	8557.48	9150.42
1-Sep	10182.54	8719.46	7110.03	6735.85	7450.19	8162.18	8557.48
2-Sep	11871.13	10182.54	8231.77	7331.81	7212.07	7569.24	8162.18
3-Sep	14404.01	11871.13	9207.15	7220.92	6854.91	7331.13	7766.89
4-Sep	14404.01	11871.13	9207.15	7220.92	6854.91	7331.13	7766.89
5-Sep	1973.04	1957.91	1937.75	1907.50	1887.66	1888.31	1888.80
6-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	1623.36	1609.11	1590.10	1561.60	1533.09	1514.08	1499.83
9-Sep	2401.01	2400.37	2399.74	2398.26	2396.99	2396.14	2395.72
10-Sep	2505.05	2501.28	2493.74	2480.54	2469.22	2461.68	2457.90
11-Sep	3753.01	3413.04	3397.10	3359.91	5370.61	6711.07	6614.69
12-Sep	4111.08	4314.75	4586.30	4750.33	4671.04	4716.48	4775.14
13-Sep	4693.26	4740.95	4777.97	4837.72	4527.31	4194.05	4111.08
14-Sep	5450.15	5282.87	4948.32	4645.57	4756.85	4777.97	4803.43
15-Sep	8726.60	7497.93	5859.71	5031.96	4629.67	4693.26	4740.95
16-Sep	4826.29	4860.57	4610.62	4111.08	4518.41	4789.97	4763.54
17-Sep	4360.68	4194.05	4246.86	4654.19	4723.90	4684.26	4677.38
18-Sep	4527.31	4277.36	4178.97	4586.30	4750.33	4697.47	4657.83
19-Sep	4775.36	4792.01	4837.72	4527.31	4111.08	4382.64	4518.41
20-Sep	4775.36	4792.01	4837.72	4527.31	4111.08	4382.64	4518.41
21-Sep	6005.83	5782.49	5559.16	5038.05	4591.38	4293.61	4144.72
22-Sep	2457.90	2452.25	2446.59	2433.39	2422.07	2414.53	2412.43
23-Sep	5410.27	5186.94	4889.16	4442.50	3995.83	3698.05	3474.72
24-Sep	4761.22	4699.81	4576.98	3979.66	3402.41	3386.48	3370.54
25-Sep	4194.05	4111.08	4382.64	4776.76	4697.47	4677.38	4716.48
26-Sep	4693.26	4740.95	4777.97	4837.72	4527.31	4194.05	4111.08
27-Sep	5366.51	5199.24	4864.68	4661.46	4772.75	4792.01	4814.86
28-Sep	6269.26	5366.51	5031.96	4629.67	4725.06	4775.36	4792.01
29-Sep	5282.87	5031.96	4781.05	4693.26	4775.36	4803.43	4826.29
30-Sep	1879.93	1865.68	1846.67	1818.17	1789.66	1770.65	1756.40

Table A – 6. Summer 2002 allocation scenario time series results for the riffle guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	19146.60	19053.47	18784.37	17478.73	16997.88	16997.88	16725.51
2-Jun	19148.78	19076.45	19176.62	19270.78	19084.51	18887.87	18440.43
3-Jun	20125.26	19685.00	19392.20	19100.09	19176.62	19276.78	19239.73
4-Jun	19489.57	19343.51	19148.78	19151.57	19301.82	19177.64	19084.51
5-Jun	19294.83	19197.46	19076.45	19226.70	19177.64	19053.47	18991.38
6-Jun	19251.74	19270.78	19177.64	18887.87	17719.16	16997.88	16997.88
7-Jun	19440.88	19294.83	19100.09	19176.62	19270.78	19146.60	19053.47
8-Jun	21005.77	20565.51	19978.51	19392.20	19100.09	19126.53	19201.66
9-Jun	21187.25	21096.51	20712.27	19831.75	19294.83	19148.78	19076.45
10-Jun	21368.74	21232.63	21096.51	20272.01	19489.57	19294.83	19197.46
11-Jun	20593.48	21249.12	21278.00	21005.77	20125.26	19538.25	19392.20
12-Jun	20374.93	21030.57	21368.74	21051.14	20272.01	19685.00	19489.57
13-Jun	21141.88	21051.14	20565.51	19538.25	19246.15	19051.41	19101.49
14-Jun	19076.45	19126.53	19226.70	19208.69	18991.38	18440.43	17959.58
15-Jun	20418.76	19978.51	19538.25	19197.46	19126.53	19226.70	19276.78
16-Jun	21187.25	21096.51	20712.27	19831.75	19294.83	19148.78	19076.45
17-Jun	21368.74	21232.63	21096.51	20272.01	19489.57	19294.83	19197.46
18-Jun	20593.48	21249.12	21278.00	21005.77	20125.26	19538.25	19392.20
19-Jun	20374.93	21030.57	21368.74	21051.14	20272.01	19685.00	19489.57
20-Jun	21414.11	21323.37	21141.88	20418.76	19538.25	19343.51	19246.15
21-Jun	20812.02	21414.11	21232.63	20859.02	19978.51	19489.57	19343.51
22-Jun	20374.93	21030.57	21368.74	21051.14	20272.01	19685.00	19489.57
23-Jun	20374.50	20593.48	21414.11	21096.51	20418.76	19831.75	19538.25
24-Jun	20641.97	20374.50	21030.57	21232.63	20859.02	20272.01	19831.75
25-Jun	20737.52	20450.86	20812.02	21278.00	21005.77	20418.76	19978.51
26-Jun	20737.52	20450.86	20812.02	21278.00	21005.77	20418.76	19978.51
27-Jun	20418.76	19978.51	19538.25	19197.46	19126.53	19226.70	19276.78
28-Jun	19831.75	19538.25	19343.51	19051.41	19226.70	19301.82	19208.69
29-Jun	21414.11	21323.37	21141.88	20418.76	19538.25	19343.51	19246.15
30-Jun	20374.93	21030.57	21368.74	21051.14	20272.01	19685.00	19489.57
1-Jul	20450.86	20374.93	21249.12	21187.25	20565.51	20125.26	19685.00
2-Jul	20737.52	20450.86	20812.02	21278.00	21005.77	20418.76	19978.51
3-Jul	20416.37	20737.52	20374.50	21368.74	21096.51	20712.27	20418.76
4-Jul	20416.37	20737.52	20374.50	21368.74	21096.51	20712.27	20418.76
5-Jul	19582.96	20416.37	20546.41	21030.57	21232.63	21051.14	20712.27
6-Jul	18332.84	19582.96	20833.08	20593.48	21323.37	21141.88	21051.14
7-Jul	17928.89	18749.55	20416.37	20374.93	21368.74	21187.25	21096.51
8-Jul	17928.89	18749.55	20416.37	20374.93	21368.74	21187.25	21096.51
9-Jul	17526.36	18332.84	19999.67	20450.86	21414.11	21278.00	21141.88
10-Jul	17928.89	18749.55	20416.37	20374.93	21368.74	21187.25	21096.51
11-Jul	18332.84	19582.96	20833.08	20593.48	21323.37	21141.88	21051.14
12-Jul	17928.89	18749.55	20416.37	20374.93	21368.74	21187.25	21096.51
13-Jul	17526.36	18332.84	19999.67	20450.86	21414.11	21278.00	21141.88
14-Jul	19999.67	20833.08	20450.86	21249.12	21141.88	21005.77	20565.51

Table A – 6, continued. Summer 2002 allocation scenario time series results for the riffle guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	20416.37	20737.52	20374.50	21368.74	21096.51	20712.27	20418.76
16-Jul	19582.96	20416.37	20546.41	21030.57	21232.63	21051.14	20712.27
17-Jul	19582.96	20416.37	20546.41	21030.57	21232.63	21051.14	20712.27
18-Jul	18749.55	19999.67	20641.97	20812.02	21278.00	21096.51	20859.02
19-Jul	18332.84	19582.96	20833.08	20593.48	21323.37	21141.88	21051.14
20-Jul	18332.84	19582.96	20833.08	20593.48	21323.37	21141.88	21051.14
21-Jul	17928.89	18749.55	20416.37	20374.93	21368.74	21187.25	21096.51
22-Jul	17928.89	18749.55	20416.37	20374.93	21368.74	21187.25	21096.51
23-Jul	17526.36	18332.84	19999.67	20450.86	21414.11	21278.00	21141.88
24-Jul	20450.86	20374.93	21249.12	21187.25	20565.51	20125.26	19685.00
25-Jul	20374.50	20593.48	21414.11	21096.51	20418.76	19831.75	19538.25
26-Jul	20450.86	20374.93	21249.12	21187.25	20565.51	20125.26	19685.00
27-Jul	21096.51	20859.02	20418.76	19489.57	19197.46	19076.45	19126.53
28-Jul	20593.48	21249.12	21278.00	21005.77	20125.26	19538.25	19392.20
29-Jul	20737.52	20450.86	20812.02	21278.00	21005.77	20418.76	19978.51
30-Jul	19999.67	20833.08	20450.86	21249.12	21141.88	21005.77	20565.51
31-Jul	18332.84	19582.96	20833.08	20593.48	21323.37	21141.88	21051.14
1-Aug	17928.89	18749.55	20416.37	20374.93	21368.74	21187.25	21096.51
2-Aug	17526.36	18332.84	19999.67	20450.86	21414.11	21278.00	21141.88
3-Aug	16721.30	17928.89	19582.96	20546.41	21030.57	21323.37	21187.25
4-Aug	16335.06	17526.36	18749.55	20641.97	20812.02	21368.74	21278.00
5-Aug	15948.82	17123.83	18749.55	20737.52	20593.48	21414.11	21278.00
6-Aug	15562.58	16721.30	18332.84	20833.08	20374.93	21249.12	21323.37
7-Aug	15562.58	16721.30	17928.89	20833.08	20374.93	21249.12	21368.74
8-Aug	15176.34	16335.06	17526.36	20416.37	20374.50	21030.57	21414.11
9-Aug	15176.34	15948.82	17526.36	19999.67	20374.50	20812.02	21414.11
10-Aug	14790.10	15948.82	17526.36	19999.67	20450.86	20812.02	21414.11
11-Aug	14790.10	15562.58	17123.83	19582.96	20450.86	20593.48	21249.12
12-Aug	14403.86	15562.58	17123.83	19582.96	20546.41	20593.48	21249.12
13-Aug	14403.86	15176.34	16721.30	19582.96	20546.41	20593.48	21030.57
14-Aug	14403.86	15176.34	16721.30	19166.25	20546.41	20374.93	21030.57
15-Aug	14017.62	15176.34	16721.30	19166.25	20641.97	20374.93	21030.57
16-Aug	14017.62	15176.34	16721.30	19166.25	20641.97	20374.93	21030.57
17-Aug	14017.62	15176.34	16335.06	19166.25	20641.97	20374.93	20812.02
18-Aug	14017.62	14790.10	16335.06	18749.55	20641.97	20374.50	20812.02
19-Aug	13696.17	14790.10	16335.06	18749.55	20737.52	20374.50	20812.02
20-Aug	13696.17	14790.10	16335.06	18749.55	20737.52	20374.50	20812.02
21-Aug	13696.17	14790.10	15948.82	18749.55	20737.52	20374.50	20593.48
22-Aug	13696.17	14790.10	15948.82	18749.55	20737.52	20374.50	20593.48
23-Aug	13696.17	14403.86	15948.82	18749.55	20737.52	20374.50	20593.48
24-Aug	13696.17	14403.86	15948.82	18332.84	20737.52	20450.86	20593.48
25-Aug	13439.51	14403.86	15948.82	18332.84	20833.08	20450.86	20593.48
26-Aug	13439.51	14403.86	15948.82	18332.84	20833.08	20450.86	20593.48
27-Aug	13439.51	14403.86	15562.58	18332.84	20833.08	20450.86	20374.93

Table A – 6, continued. Summer 2002 allocation scenario time series results for the riffle guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	13439.51	14403.86	15562.58	18332.84	20833.08	20450.86	20374.93
29-Aug	13439.51	14403.86	15562.58	18332.84	20833.08	20450.86	20374.93
30-Aug	13439.51	14403.86	15562.58	18332.84	20833.08	20450.86	20374.93
31-Aug	13439.51	14017.62	15562.58	18332.84	20833.08	20450.86	20374.93
1-Sep	13439.51	14017.62	15562.58	17928.89	20833.08	20450.86	20374.93
2-Sep	13182.85	14017.62	15562.58	17928.89	20416.37	20546.41	20374.93
3-Sep	13182.85	14017.62	15562.58	17928.89	20416.37	20546.41	20374.93
4-Sep	13182.85	14017.62	15562.58	17928.89	20416.37	20546.41	20374.93
5-Sep	13182.85	14017.62	15176.34	17928.89	20416.37	20546.41	20374.50
6-Sep	13182.85	14017.62	15176.34	17928.89	20416.37	20546.41	20374.50
7-Sep	13182.85	14017.62	15176.34	17928.89	20416.37	20546.41	20374.50
8-Sep	13182.85	14017.62	15176.34	17928.89	20416.37	20546.41	20374.50
9-Sep	13182.85	14017.62	15176.34	17928.89	20416.37	20546.41	20374.50
10-Sep	13182.85	14017.62	15176.34	17928.89	20416.37	20546.41	20374.50
11-Sep	13182.85	14017.62	15176.34	17928.89	20416.37	20546.41	20374.50
12-Sep	13182.85	14017.62	15176.34	17928.89	20416.37	20546.41	20374.50
13-Sep	13182.85	14017.62	15176.34	17928.89	20416.37	20546.41	20374.50
14-Sep	13182.85	14017.62	15176.34	17928.89	20416.37	20546.41	20374.50
15-Sep	13182.85	14017.62	15562.58	17928.89	20416.37	20546.41	20374.93
16-Sep	13182.85	14017.62	15562.58	17928.89	20416.37	20546.41	20374.93
17-Sep	13182.85	14017.62	15176.34	17928.89	20416.37	20546.41	20374.50
18-Sep	13182.85	14017.62	15176.34	17928.89	20416.37	20546.41	20374.50
19-Sep	13182.85	14017.62	15176.34	17928.89	20416.37	20546.41	20374.50
20-Sep	13182.85	14017.62	15176.34	17928.89	20416.37	20546.41	20374.50
21-Sep	14790.10	15948.82	17526.36	19999.67	20450.86	20812.02	21414.11
22-Sep	20737.52	20450.86	20812.02	21278.00	21005.77	20418.76	19978.51
23-Sep	20450.86	20374.93	21249.12	21187.25	20565.51	20125.26	19685.00
24-Sep	16721.30	17928.89	19166.25	20546.41	21030.57	21323.37	21232.63
25-Sep	16721.30	17928.89	19582.96	20546.41	21030.57	21323.37	21187.25
26-Sep	8154.60	8020.36	7886.13	7572.91	7304.44	7125.46	7035.97
27-Sep	1968.16	1952.84	1922.20	1868.58	1822.62	1791.98	1776.67
28-Sep	6823.79	6706.87	6589.96	6317.15	6083.32	5927.44	5849.49
29-Sep	14323.35	14135.39	13882.07	13489.82	13005.29	12620.77	12332.37
30-Sep	17959.58	17238.31	16997.88	16997.88	15976.53	15377.34	15162.18

Table A – 7. Summer 2002 allocation scenario time series results for the fast generalist guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	24061.12	24117.89	24246.61	24320.84	23751.39	23170.41	22589.37
2-Jun	23428.47	23645.96	23788.41	23985.42	24098.96	24201.18	24297.81
3-Jun	22402.34	22626.33	22973.79	23519.40	23788.41	23930.88	24004.34
4-Jun	22791.93	23064.73	23428.47	23752.80	23966.49	24042.19	24098.96
5-Jun	23155.66	23337.54	23645.96	23859.64	24042.19	24117.89	24155.74
6-Jun	23895.26	23985.42	24042.19	24201.18	24315.08	24187.12	23896.63
7-Jun	22882.86	23155.66	23519.40	23788.41	23985.42	24061.12	24117.89
8-Jun	21954.37	22178.36	22477.00	22973.79	23519.40	23717.19	23824.03
9-Jun	21451.81	21703.09	22103.69	22551.67	23155.66	23428.47	23645.96
10-Jun	20949.25	21326.17	21703.09	22327.68	22791.93	23155.66	23337.54
11-Jun	19913.71	20600.30	21200.53	21954.37	22402.34	22700.99	22973.79
12-Jun	19684.85	20371.44	20949.25	21828.73	22327.68	22626.33	22791.93
13-Jun	21577.45	21828.73	22178.36	22700.99	23246.60	23610.34	23681.57
14-Jun	23645.96	23717.19	23859.64	24023.27	24155.74	24297.81	24309.33
15-Jun	22253.02	22477.00	22700.99	23337.54	23717.19	23859.64	23930.88
16-Jun	21451.81	21703.09	22103.69	22551.67	23155.66	23428.47	23645.96
17-Jun	20949.25	21326.17	21703.09	22327.68	22791.93	23155.66	23337.54
18-Jun	19913.71	20600.30	21200.53	21954.37	22402.34	22700.99	22973.79
19-Jun	19684.85	20371.44	20949.25	21828.73	22327.68	22626.33	22791.93
20-Jun	20823.61	21074.89	21577.45	22253.02	22700.99	23064.73	23246.60
21-Jun	20142.57	20823.61	21326.17	22029.03	22477.00	22791.93	23064.73
22-Jun	19684.85	20371.44	20949.25	21828.73	22327.68	22626.33	22791.93
23-Jun	19675.40	19913.71	20823.61	21703.09	22253.02	22551.67	22700.99
24-Jun	19056.07	19675.40	20371.44	21326.17	22029.03	22327.68	22551.67
25-Jun	18835.55	19497.10	20142.57	21200.53	21954.37	22253.02	22477.00
26-Jun	18835.55	19497.10	20142.57	21200.53	21954.37	22253.02	22477.00
27-Jun	22253.02	22477.00	22700.99	23337.54	23717.19	23859.64	23930.88
28-Jun	22551.67	22700.99	23064.73	23610.34	23859.64	23966.49	24023.27
29-Jun	20823.61	21074.89	21577.45	22253.02	22700.99	23064.73	23246.60
30-Jun	19684.85	20371.44	20949.25	21828.73	22327.68	22626.33	22791.93
1-Jul	19497.10	19684.85	20600.30	21451.81	22178.36	22402.34	22626.33
2-Jul	18835.55	19497.10	20142.57	21200.53	21954.37	22253.02	22477.00
3-Jul	18307.63	18835.55	19675.40	20949.25	21703.09	22103.69	22253.02
4-Jul	18307.63	18835.55	19675.40	20949.25	21703.09	22103.69	22253.02
5-Jul	17692.80	18307.63	19276.58	20371.44	21326.17	21828.73	22103.69
6-Jul	16770.56	17692.80	18615.04	19913.71	21074.89	21577.45	21828.73
7-Jul	16516.62	17077.97	18307.63	19684.85	20949.25	21451.81	21703.09
8-Jul	16516.62	17077.97	18307.63	19684.85	20949.25	21451.81	21703.09
9-Jul	16268.62	16770.56	18000.21	19497.10	20823.61	21200.53	21577.45
10-Jul	16516.62	17077.97	18307.63	19684.85	20949.25	21451.81	21703.09
11-Jul	16770.56	17692.80	18615.04	19913.71	21074.89	21577.45	21828.73
12-Jul	16516.62	17077.97	18307.63	19684.85	20949.25	21451.81	21703.09
13-Jul	16268.62	16770.56	18000.21	19497.10	20823.61	21200.53	21577.45

Table A – 7, continued. Summer 2002 allocation scenario time series results for the fast generalist guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
14-Jul	18000.21	18615.04	19497.10	20600.30	21577.45	21954.37	22178.36
15-Jul	18307.63	18835.55	19675.40	20949.25	21703.09	22103.69	22253.02
16-Jul	17692.80	18307.63	19276.58	20371.44	21326.17	21828.73	22103.69
17-Jul	17692.80	18307.63	19276.58	20371.44	21326.17	21828.73	22103.69
18-Jul	17077.97	18000.21	19056.07	20142.57	21200.53	21703.09	22029.03
19-Jul	16770.56	17692.80	18615.04	19913.71	21074.89	21577.45	21828.73
20-Jul	16770.56	17692.80	18615.04	19913.71	21074.89	21577.45	21828.73
21-Jul	16516.62	17077.97	18307.63	19684.85	20949.25	21451.81	21703.09
22-Jul	16516.62	17077.97	18307.63	19684.85	20949.25	21451.81	21703.09
23-Jul	16268.62	16770.56	18000.21	19497.10	20823.61	21200.53	21577.45
24-Jul	19497.10	19684.85	20600.30	21451.81	22178.36	22402.34	22626.33
25-Jul	19675.40	19913.71	20823.61	21703.09	22253.02	22551.67	22700.99
26-Jul	19497.10	19684.85	20600.30	21451.81	22178.36	22402.34	22626.33
27-Jul	21703.09	22029.03	22253.02	22791.93	23337.54	23645.96	23717.19
28-Jul	19913.71	20600.30	21200.53	21954.37	22402.34	22700.99	22973.79
29-Jul	18835.55	19497.10	20142.57	21200.53	21954.37	22253.02	22477.00
30-Jul	18000.21	18615.04	19497.10	20600.30	21577.45	21954.37	22178.36
31-Jul	16770.56	17692.80	18615.04	19913.71	21074.89	21577.45	21828.73
1-Aug	16516.62	17077.97	18307.63	19684.85	20949.25	21451.81	21703.09
2-Aug	16268.62	16770.56	18000.21	19497.10	20823.61	21200.53	21577.45
3-Aug	15772.61	16516.62	17692.80	19276.58	20371.44	21074.89	21451.81
4-Aug	15311.74	16268.62	17077.97	19056.07	20142.57	20949.25	21200.53
5-Aug	14850.87	16020.61	17077.97	18835.55	19913.71	20823.61	21200.53
6-Aug	14390.00	15772.61	16770.56	18615.04	19684.85	20600.30	21074.89
7-Aug	14390.00	15772.61	16516.62	18615.04	19684.85	20600.30	20949.25
8-Aug	13929.13	15311.74	16268.62	18307.63	19675.40	20371.44	20823.61
9-Aug	13929.13	14850.87	16268.62	18000.21	19675.40	20142.57	20823.61
10-Aug	13468.26	14850.87	16268.62	18000.21	19497.10	20142.57	20823.61
11-Aug	13468.26	14390.00	16020.61	17692.80	19497.10	19913.71	20600.30
12-Aug	13007.39	14390.00	16020.61	17692.80	19276.58	19913.71	20600.30
13-Aug	13007.39	13929.13	15772.61	17692.80	19276.58	19913.71	20371.44
14-Aug	13007.39	13929.13	15772.61	17385.39	19276.58	19684.85	20371.44
15-Aug	12546.52	13929.13	15772.61	17385.39	19056.07	19684.85	20371.44
16-Aug	12546.52	13929.13	15772.61	17385.39	19056.07	19684.85	20371.44
17-Aug	12546.52	13929.13	15311.74	17385.39	19056.07	19684.85	20142.57
18-Aug	12546.52	13468.26	15311.74	17077.97	19056.07	19675.40	20142.57
19-Aug	12014.83	13468.26	15311.74	17077.97	18835.55	19675.40	20142.57
20-Aug	12014.83	13468.26	15311.74	17077.97	18835.55	19675.40	20142.57
21-Aug	12014.83	13468.26	14850.87	17077.97	18835.55	19675.40	19913.71
22-Aug	12014.83	13468.26	14850.87	17077.97	18835.55	19675.40	19913.71
23-Aug	12014.83	13007.39	14850.87	17077.97	18835.55	19675.40	19913.71
24-Aug	12014.83	13007.39	14850.87	16770.56	18835.55	19497.10	19913.71
25-Aug	11412.33	13007.39	14850.87	16770.56	18615.04	19497.10	19913.71
26-Aug	11412.33	13007.39	14850.87	16770.56	18615.04	19497.10	19913.71

Table A – 7, continued. Summer 2002 allocation scenario time series results for the fast generalist guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
27-Aug	11412.33	13007.39	14390.00	16770.56	18615.04	19497.10	19684.85
28-Aug	11412.33	13007.39	14390.00	16770.56	18615.04	19497.10	19684.85
29-Aug	11412.33	13007.39	14390.00	16770.56	18615.04	19497.10	19684.85
30-Aug	11412.33	13007.39	14390.00	16770.56	18615.04	19497.10	19684.85
31-Aug	11412.33	12546.52	14390.00	16770.56	18615.04	19497.10	19684.85
1-Sep	11412.33	12546.52	14390.00	16516.62	18615.04	19497.10	19684.85
2-Sep	10809.83	12546.52	14390.00	16516.62	18307.63	19276.58	19684.85
3-Sep	10809.83	12546.52	14390.00	16516.62	18307.63	19276.58	19684.85
4-Sep	10809.83	12546.52	14390.00	16516.62	18307.63	19276.58	19684.85
5-Sep	10809.83	12546.52	13929.13	16516.62	18307.63	19276.58	19675.40
6-Sep	10809.83	12546.52	13929.13	16516.62	18307.63	19276.58	19675.40
7-Sep	10809.83	12546.52	13929.13	16516.62	18307.63	19276.58	19675.40
8-Sep	10809.83	12546.52	13929.13	16516.62	18307.63	19276.58	19675.40
9-Sep	10809.83	12546.52	13929.13	16516.62	18307.63	19276.58	19675.40
10-Sep	10809.83	12546.52	13929.13	16516.62	18307.63	19276.58	19675.40
11-Sep	10809.83	12546.52	13929.13	16516.62	18307.63	19276.58	19675.40
12-Sep	10809.83	12546.52	13929.13	16516.62	18307.63	19276.58	19675.40
13-Sep	10809.83	12546.52	13929.13	16516.62	18307.63	19276.58	19675.40
14-Sep	10809.83	12546.52	13929.13	16516.62	18307.63	19276.58	19675.40
15-Sep	10809.83	12546.52	14390.00	16516.62	18307.63	19276.58	19684.85
16-Sep	10809.83	12546.52	14390.00	16516.62	18307.63	19276.58	19684.85
17-Sep	10809.83	12546.52	13929.13	16516.62	18307.63	19276.58	19675.40
18-Sep	10809.83	12546.52	13929.13	16516.62	18307.63	19276.58	19675.40
19-Sep	10809.83	12546.52	13929.13	16516.62	18307.63	19276.58	19675.40
20-Sep	10809.83	12546.52	13929.13	16516.62	18307.63	19276.58	19675.40
21-Sep	13468.26	14850.87	16268.62	18000.21	19497.10	20142.57	20823.61
22-Sep	18835.55	19497.10	20142.57	21200.53	21954.37	22253.02	22477.00
23-Sep	19497.10	19684.85	20600.30	21451.81	22178.36	22402.34	22626.33
24-Sep	15772.61	16516.62	17385.39	19276.58	20371.44	21074.89	21326.17
25-Sep	15772.61	16516.62	17692.80	19276.58	20371.44	21074.89	21451.81
26-Sep	14675.26	14474.50	14273.73	13805.28	13403.75	13136.06	13002.22
27-Sep	3170.36	3119.50	3017.78	2839.76	2687.18	2585.46	2534.60
28-Sep	12645.43	12411.41	12177.38	11631.32	11163.27	10851.23	10695.22
29-Sep	20084.43	19851.59	19584.73	19380.54	18980.21	18582.57	18284.33
30-Sep	24309.33	24326.60	24041.87	23025.17	21492.12	20614.32	20394.87

Table A – 8. Summer 2002 allocation scenario time series results for the pool – run guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	16908.81	16893.24	16786.77	16847.86	16135.03	15378.55	14930.73
2-Jun	16796.03	16883.12	16906.07	16929.58	16898.43	16834.82	16760.56
3-Jun	16221.51	16408.34	16592.65	16836.71	16906.07	16929.03	16924.39
4-Jun	16511.29	16633.32	16796.03	16900.34	16934.77	16914.01	16898.43
5-Jun	16674.00	16755.35	16883.12	16917.55	16914.01	16893.24	16882.86
6-Jun	16923.29	16929.58	16914.01	16834.82	16826.03	16702.39	16324.15
7-Jun	16551.97	16674.00	16836.71	16906.07	16929.58	16908.81	16893.24
8-Jun	15847.85	16034.68	16283.79	16592.65	16836.71	16894.60	16911.81
9-Jun	15666.13	15756.99	15972.40	16346.07	16674.00	16796.03	16883.12
10-Jun	15484.42	15620.71	15756.99	16159.23	16511.29	16674.00	16755.35
11-Jun	15082.27	15326.80	15575.28	15847.85	16221.51	16470.62	16592.65
12-Jun	15000.76	15245.29	15484.42	15802.42	16159.23	16408.34	16511.29
13-Jun	15711.56	15802.42	16034.68	16470.62	16714.68	16877.38	16888.86
14-Jun	16883.12	16894.60	16917.55	16919.20	16882.86	16760.56	16804.21
15-Jun	16096.96	16283.79	16470.62	16755.35	16894.60	16917.55	16929.03
16-Jun	15666.13	15756.99	15972.40	16346.07	16674.00	16796.03	16883.12
17-Jun	15484.42	15620.71	15756.99	16159.23	16511.29	16674.00	16755.35
18-Jun	15082.27	15326.80	15575.28	15847.85	16221.51	16470.62	16592.65
19-Jun	15000.76	15245.29	15484.42	15802.42	16159.23	16408.34	16511.29
20-Jun	15438.99	15529.85	15711.56	16096.96	16470.62	16633.32	16714.68
21-Jun	15163.78	15438.99	15620.71	15910.13	16283.79	16511.29	16633.32
22-Jun	15000.76	15245.29	15484.42	15802.42	16159.23	16408.34	16511.29
23-Jun	15000.32	15082.27	15438.99	15756.99	16096.96	16346.07	16470.62
24-Jun	14527.95	15000.32	15245.29	15620.71	15910.13	16159.23	16346.07
25-Jun	14359.28	14865.29	15163.78	15575.28	15847.85	16096.96	16283.79
26-Jun	14359.28	14865.29	15163.78	15575.28	15847.85	16096.96	16283.79
27-Jun	16096.96	16283.79	16470.62	16755.35	16894.60	16917.55	16929.03
28-Jun	16346.07	16470.62	16633.32	16877.38	16917.55	16934.77	16919.20
29-Jun	15438.99	15529.85	15711.56	16096.96	16470.62	16633.32	16714.68
30-Jun	15000.76	15245.29	15484.42	15802.42	16159.23	16408.34	16511.29
1-Jul	14865.29	15000.76	15326.80	15666.13	16034.68	16221.51	16408.34
2-Jul	14359.28	14865.29	15163.78	15575.28	15847.85	16096.96	16283.79
3-Jul	14039.25	14359.28	15000.32	15484.42	15756.99	15972.40	16096.96
4-Jul	14039.25	14359.28	15000.32	15484.42	15756.99	15972.40	16096.96
5-Jul	13736.53	14039.25	14696.62	15245.29	15620.71	15802.42	15972.40
6-Jul	13282.45	13736.53	14190.61	15082.27	15529.85	15711.56	15802.42
7-Jul	13123.67	13433.81	14039.25	15000.76	15484.42	15666.13	15756.99
8-Jul	13123.67	13433.81	14039.25	15000.76	15484.42	15666.13	15756.99
9-Jul	12964.08	13282.45	13887.89	14865.29	15438.99	15575.28	15711.56
10-Jul	13123.67	13433.81	14039.25	15000.76	15484.42	15666.13	15756.99
11-Jul	13282.45	13736.53	14190.61	15082.27	15529.85	15711.56	15802.42
12-Jul	13123.67	13433.81	14039.25	15000.76	15484.42	15666.13	15756.99
13-Jul	12964.08	13282.45	13887.89	14865.29	15438.99	15575.28	15711.56
14-Jul	13887.89	14190.61	14865.29	15326.80	15711.56	15847.85	16034.68

Table A – 8, continued. Summer 2002 allocation scenario time series results for the pool – run guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Microhabitat Index						
	Site Q	+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	14039.25	14359.28	15000.32	15484.42	15756.99	15972.40	16096.96
16-Jul	13736.53	14039.25	14696.62	15245.29	15620.71	15802.42	15972.40
17-Jul	13736.53	14039.25	14696.62	15245.29	15620.71	15802.42	15972.40
18-Jul	13433.81	13887.89	14527.95	15163.78	15575.28	15756.99	15910.13
19-Jul	13282.45	13736.53	14190.61	15082.27	15529.85	15711.56	15802.42
20-Jul	13282.45	13736.53	14190.61	15082.27	15529.85	15711.56	15802.42
21-Jul	13123.67	13433.81	14039.25	15000.76	15484.42	15666.13	15756.99
22-Jul	13123.67	13433.81	14039.25	15000.76	15484.42	15666.13	15756.99
23-Jul	12964.08	13282.45	13887.89	14865.29	15438.99	15575.28	15711.56
24-Jul	14865.29	15000.76	15326.80	15666.13	16034.68	16221.51	16408.34
25-Jul	15000.32	15082.27	15438.99	15756.99	16096.96	16346.07	16470.62
26-Jul	14865.29	15000.76	15326.80	15666.13	16034.68	16221.51	16408.34
27-Jul	15756.99	15910.13	16096.96	16511.29	16755.35	16883.12	16894.60
28-Jul	15082.27	15326.80	15575.28	15847.85	16221.51	16470.62	16592.65
29-Jul	14359.28	14865.29	15163.78	15575.28	15847.85	16096.96	16283.79
30-Jul	13887.89	14190.61	14865.29	15326.80	15711.56	15847.85	16034.68
31-Jul	13282.45	13736.53	14190.61	15082.27	15529.85	15711.56	15802.42
1-Aug	13123.67	13433.81	14039.25	15000.76	15484.42	15666.13	15756.99
2-Aug	12964.08	13282.45	13887.89	14865.29	15438.99	15575.28	15711.56
3-Aug	12644.89	13123.67	13736.53	14696.62	15245.29	15529.85	15666.13
4-Aug	12343.68	12964.08	13433.81	14527.95	15163.78	15484.42	15575.28
5-Aug	12042.47	12804.48	13433.81	14359.28	15082.27	15438.99	15575.28
6-Aug	11741.26	12644.89	13282.45	14190.61	15000.76	15326.80	15529.85
7-Aug	11741.26	12644.89	13123.67	14190.61	15000.76	15326.80	15484.42
8-Aug	11440.05	12343.68	12964.08	14039.25	15000.32	15245.29	15438.99
9-Aug	11440.05	12042.47	12964.08	13887.89	15000.32	15163.78	15438.99
10-Aug	11138.84	12042.47	12964.08	13887.89	14865.29	15163.78	15438.99
11-Aug	11138.84	11741.26	12804.48	13736.53	14865.29	15082.27	15326.80
12-Aug	10837.63	11741.26	12804.48	13736.53	14696.62	15082.27	15326.80
13-Aug	10837.63	11440.05	12644.89	13736.53	14696.62	15082.27	15245.29
14-Aug	10837.63	11440.05	12644.89	13585.17	14696.62	15000.76	15245.29
15-Aug	10536.42	11440.05	12644.89	13585.17	14527.95	15000.76	15245.29
16-Aug	10536.42	11440.05	12644.89	13585.17	14527.95	15000.76	15245.29
17-Aug	10536.42	11440.05	12343.68	13585.17	14527.95	15000.76	15163.78
18-Aug	10536.42	11138.84	12343.68	13433.81	14527.95	15000.32	15163.78
19-Aug	10255.11	11138.84	12343.68	13433.81	14359.28	15000.32	15163.78
20-Aug	10255.11	11138.84	12343.68	13433.81	14359.28	15000.32	15163.78
21-Aug	10255.11	11138.84	12042.47	13433.81	14359.28	15000.32	15082.27
22-Aug	10255.11	11138.84	12042.47	13433.81	14359.28	15000.32	15082.27
23-Aug	10255.11	10837.63	12042.47	13433.81	14359.28	15000.32	15082.27
24-Aug	10255.11	10837.63	12042.47	13282.45	14359.28	14865.29	15082.27
25-Aug	9993.70	10837.63	12042.47	13282.45	14190.61	14865.29	15082.27
26-Aug	9993.70	10837.63	12042.47	13282.45	14190.61	14865.29	15082.27
27-Aug	9993.70	10837.63	11741.26	13282.45	14190.61	14865.29	15000.76

Table A – 8, continued. Summer 2002 allocation scenario time series results for the pool – run guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	9993.70	10837.63	11741.26	13282.45	14190.61	14865.29	15000.76
29-Aug	9993.70	10837.63	11741.26	13282.45	14190.61	14865.29	15000.76
30-Aug	9993.70	10837.63	11741.26	13282.45	14190.61	14865.29	15000.76
31-Aug	9993.70	10536.42	11741.26	13282.45	14190.61	14865.29	15000.76
1-Sep	9993.70	10536.42	11741.26	13123.67	14190.61	14865.29	15000.76
2-Sep	9732.29	10536.42	11741.26	13123.67	14039.25	14696.62	15000.76
3-Sep	9732.29	10536.42	11741.26	13123.67	14039.25	14696.62	15000.76
4-Sep	9732.29	10536.42	11741.26	13123.67	14039.25	14696.62	15000.76
5-Sep	9732.29	10536.42	11440.05	13123.67	14039.25	14696.62	15000.32
6-Sep	9732.29	10536.42	11440.05	13123.67	14039.25	14696.62	15000.32
7-Sep	9732.29	10536.42	11440.05	13123.67	14039.25	14696.62	15000.32
8-Sep	9732.29	10536.42	11440.05	13123.67	14039.25	14696.62	15000.32
9-Sep	9732.29	10536.42	11440.05	13123.67	14039.25	14696.62	15000.32
10-Sep	9732.29	10536.42	11440.05	13123.67	14039.25	14696.62	15000.32
11-Sep	9732.29	10536.42	11440.05	13123.67	14039.25	14696.62	15000.32
12-Sep	9732.29	10536.42	11440.05	13123.67	14039.25	14696.62	15000.32
13-Sep	9732.29	10536.42	11440.05	13123.67	14039.25	14696.62	15000.32
14-Sep	9732.29	10536.42	11440.05	13123.67	14039.25	14696.62	15000.32
15-Sep	9732.29	10536.42	11741.26	13123.67	14039.25	14696.62	15000.76
16-Sep	9732.29	10536.42	11741.26	13123.67	14039.25	14696.62	15000.76
17-Sep	9732.29	10536.42	11440.05	13123.67	14039.25	14696.62	15000.32
18-Sep	9732.29	10536.42	11440.05	13123.67	14039.25	14696.62	15000.32
19-Sep	9732.29	10536.42	11440.05	13123.67	14039.25	14696.62	15000.32
20-Sep	9732.29	10536.42	11440.05	13123.67	14039.25	14696.62	15000.32
21-Sep	11138.84	12042.47	12964.08	13887.89	14865.29	15163.78	15438.99
22-Sep	14359.28	14865.29	15163.78	15575.28	15847.85	16096.96	16283.79
23-Sep	14865.29	15000.76	15326.80	15666.13	16034.68	16221.51	16408.34
24-Sep	12644.89	13123.67	13585.17	14696.62	15245.29	15529.85	15620.71
25-Sep	12644.89	13123.67	13736.53	14696.62	15245.29	15529.85	15666.13
26-Sep	11408.91	11264.94	11120.96	10785.02	10497.07	10305.11	10209.13
27-Sep	3317.82	3284.77	3218.67	3102.99	3003.84	2937.74	2904.69
28-Sep	9962.24	9807.89	9653.53	9293.36	8984.64	8778.83	8675.92
29-Sep	14260.84	14105.62	13897.95	13583.25	13421.79	13416.31	13412.20
30-Sep	16804.21	16869.68	16513.27	15189.43	14699.27	14514.09	14467.80

Table A – 9. Summer 2002 allocation scenario time series results for the pool – cover guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	7735.03	7593.91	7460.17	7429.74	7359.43	7293.36	7277.32
2-Jun	8534.38	8491.66	8259.90	7923.17	7640.95	7480.00	7438.21
3-Jun	8597.62	8504.52	8496.32	8541.99	8259.90	8028.15	7876.14
4-Jun	8481.10	8503.93	8534.38	8317.84	7970.21	7782.06	7640.95
5-Jun	8511.55	8526.77	8491.66	8144.03	7782.06	7593.91	7499.84
6-Jun	8086.09	7923.17	7782.06	7480.00	7431.86	7408.98	7375.95
7-Jun	8488.71	8511.55	8541.99	8259.90	7923.17	7735.03	7593.91
8-Jun	8783.81	8690.71	8566.59	8496.32	8541.99	8375.78	8201.97
9-Jun	8697.32	8740.57	8721.75	8535.55	8511.55	8534.38	8491.66
10-Jun	8610.83	8675.70	8740.57	8628.65	8481.10	8511.55	8526.77
11-Jun	8104.75	8361.83	8654.08	8783.81	8597.62	8473.49	8496.32
12-Jun	8019.06	8276.14	8610.83	8762.19	8628.65	8504.52	8481.10
13-Jun	8718.94	8762.19	8690.71	8473.49	8519.16	8549.60	8433.72
14-Jun	8491.66	8375.78	8144.03	7829.10	7499.84	7438.21	7433.97
15-Jun	8659.68	8566.59	8473.49	8526.77	8375.78	8144.03	8028.15
16-Jun	8697.32	8740.57	8721.75	8535.55	8511.55	8534.38	8491.66
17-Jun	8610.83	8675.70	8740.57	8628.65	8481.10	8511.55	8526.77
18-Jun	8104.75	8361.83	8654.08	8783.81	8597.62	8473.49	8496.32
19-Jun	8019.06	8276.14	8610.83	8762.19	8628.65	8504.52	8481.10
20-Jun	8589.21	8632.45	8718.94	8659.68	8473.49	8503.93	8519.16
21-Jun	8190.45	8589.21	8675.70	8752.78	8566.59	8481.10	8503.93
22-Jun	8019.06	8276.14	8610.83	8762.19	8628.65	8504.52	8481.10
23-Jun	7959.83	8104.75	8589.21	8740.57	8659.68	8535.55	8473.49
24-Jun	7831.86	7959.83	8276.14	8675.70	8752.78	8628.65	8535.55
25-Jun	7790.38	7914.80	8190.45	8654.08	8783.81	8659.68	8566.59
26-Jun	7790.38	7914.80	8190.45	8654.08	8783.81	8659.68	8566.59
27-Jun	8659.68	8566.59	8473.49	8526.77	8375.78	8144.03	8028.15
28-Jun	8535.55	8473.49	8503.93	8549.60	8144.03	7970.21	7829.10
29-Jun	8589.21	8632.45	8718.94	8659.68	8473.49	8503.93	8519.16
30-Jun	8019.06	8276.14	8610.83	8762.19	8628.65	8504.52	8481.10
1-Jul	7914.80	8019.06	8361.83	8697.32	8690.71	8597.62	8504.52
2-Jul	7790.38	7914.80	8190.45	8654.08	8783.81	8659.68	8566.59
3-Jul	7633.11	7790.38	7959.83	8610.83	8740.57	8721.75	8659.68
4-Jul	7633.11	7790.38	7959.83	8610.83	8740.57	8721.75	8659.68
5-Jul	7401.52	7633.11	7873.33	8276.14	8675.70	8762.19	8721.75
6-Jul	7054.12	7401.52	7748.91	8104.75	8632.45	8718.94	8762.19
7-Jul	6829.37	7169.92	7633.11	8019.06	8610.83	8697.32	8740.57
8-Jul	6829.37	7169.92	7633.11	8019.06	8610.83	8697.32	8740.57
9-Jul	6592.51	7054.12	7517.31	7914.80	8589.21	8654.08	8718.94
10-Jul	6829.37	7169.92	7633.11	8019.06	8610.83	8697.32	8740.57
11-Jul	7054.12	7401.52	7748.91	8104.75	8632.45	8718.94	8762.19
12-Jul	6829.37	7169.92	7633.11	8019.06	8610.83	8697.32	8740.57
13-Jul	6592.51	7054.12	7517.31	7914.80	8589.21	8654.08	8718.94
14-Jul	7517.31	7748.91	7914.80	8361.83	8718.94	8783.81	8690.71

Table A – 9, continued. Summer 2002 allocation scenario time series results for the pool – cover guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	7633.11	7790.38	7959.83	8610.83	8740.57	8721.75	8659.68
16-Jul	7401.52	7633.11	7873.33	8276.14	8675.70	8762.19	8721.75
17-Jul	7401.52	7633.11	7873.33	8276.14	8675.70	8762.19	8721.75
18-Jul	7169.92	7517.31	7831.86	8190.45	8654.08	8740.57	8752.78
19-Jul	7054.12	7401.52	7748.91	8104.75	8632.45	8718.94	8762.19
20-Jul	7054.12	7401.52	7748.91	8104.75	8632.45	8718.94	8762.19
21-Jul	6829.37	7169.92	7633.11	8019.06	8610.83	8697.32	8740.57
22-Jul	6829.37	7169.92	7633.11	8019.06	8610.83	8697.32	8740.57
23-Jul	6592.51	7054.12	7517.31	7914.80	8589.21	8654.08	8718.94
24-Jul	7914.80	8019.06	8361.83	8697.32	8690.71	8597.62	8504.52
25-Jul	7959.83	8104.75	8589.21	8740.57	8659.68	8535.55	8473.49
26-Jul	7914.80	8019.06	8361.83	8697.32	8690.71	8597.62	8504.52
27-Jul	8740.57	8752.78	8659.68	8481.10	8526.77	8491.66	8375.78
28-Jul	8104.75	8361.83	8654.08	8783.81	8597.62	8473.49	8496.32
29-Jul	7790.38	7914.80	8190.45	8654.08	8783.81	8659.68	8566.59
30-Jul	7517.31	7748.91	7914.80	8361.83	8718.94	8783.81	8690.71
31-Jul	7054.12	7401.52	7748.91	8104.75	8632.45	8718.94	8762.19
1-Aug	6829.37	7169.92	7633.11	8019.06	8610.83	8697.32	8740.57
2-Aug	6592.51	7054.12	7517.31	7914.80	8589.21	8654.08	8718.94
3-Aug	6118.80	6829.37	7401.52	7873.33	8276.14	8632.45	8697.32
4-Aug	5997.46	6592.51	7169.92	7831.86	8190.45	8610.83	8654.08
5-Aug	5876.13	6355.66	7169.92	7790.38	8104.75	8589.21	8654.08
6-Aug	5754.79	6118.80	7054.12	7748.91	8019.06	8361.83	8632.45
7-Aug	5754.79	6118.80	6829.37	7748.91	8019.06	8361.83	8610.83
8-Aug	5633.46	5997.46	6592.51	7633.11	7959.83	8276.14	8589.21
9-Aug	5633.46	5876.13	6592.51	7517.31	7959.83	8190.45	8589.21
10-Aug	5512.12	5876.13	6592.51	7517.31	7914.80	8190.45	8589.21
11-Aug	5512.12	5754.79	6355.66	7401.52	7914.80	8104.75	8361.83
12-Aug	5390.78	5754.79	6355.66	7401.52	7873.33	8104.75	8361.83
13-Aug	5390.78	5633.46	6118.80	7401.52	7873.33	8104.75	8276.14
14-Aug	5390.78	5633.46	6118.80	7285.72	7873.33	8019.06	8276.14
15-Aug	5269.45	5633.46	6118.80	7285.72	7831.86	8019.06	8276.14
16-Aug	5269.45	5633.46	6118.80	7285.72	7831.86	8019.06	8276.14
17-Aug	5269.45	5633.46	5997.46	7285.72	7831.86	8019.06	8190.45
18-Aug	5269.45	5512.12	5997.46	7169.92	7831.86	7959.83	8190.45
19-Aug	5165.51	5512.12	5997.46	7169.92	7790.38	7959.83	8190.45
20-Aug	5165.51	5512.12	5997.46	7169.92	7790.38	7959.83	8190.45
21-Aug	5165.51	5512.12	5876.13	7169.92	7790.38	7959.83	8104.75
22-Aug	5165.51	5512.12	5876.13	7169.92	7790.38	7959.83	8104.75
23-Aug	5165.51	5390.78	5876.13	7169.92	7790.38	7959.83	8104.75
24-Aug	5165.51	5390.78	5876.13	7054.12	7790.38	7914.80	8104.75
25-Aug	5078.96	5390.78	5876.13	7054.12	7748.91	7914.80	8104.75
26-Aug	5078.96	5390.78	5876.13	7054.12	7748.91	7914.80	8104.75
27-Aug	5078.96	5390.78	5754.79	7054.12	7748.91	7914.80	8019.06

Table A – 9, continued. Summer 2002 allocation scenario time series results for the pool – cover guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	5078.96	5390.78	5754.79	7054.12	7748.91	7914.80	8019.06
29-Aug	5078.96	5390.78	5754.79	7054.12	7748.91	7914.80	8019.06
30-Aug	5078.96	5390.78	5754.79	7054.12	7748.91	7914.80	8019.06
31-Aug	5078.96	5269.45	5754.79	7054.12	7748.91	7914.80	8019.06
1-Sep	5078.96	5269.45	5754.79	6829.37	7748.91	7914.80	8019.06
2-Sep	4992.41	5269.45	5754.79	6829.37	7633.11	7873.33	8019.06
3-Sep	4992.41	5269.45	5754.79	6829.37	7633.11	7873.33	8019.06
4-Sep	4992.41	5269.45	5754.79	6829.37	7633.11	7873.33	8019.06
5-Sep	4992.41	5269.45	5633.46	6829.37	7633.11	7873.33	7959.83
6-Sep	4992.41	5269.45	5633.46	6829.37	7633.11	7873.33	7959.83
7-Sep	4992.41	5269.45	5633.46	6829.37	7633.11	7873.33	7959.83
8-Sep	4992.41	5269.45	5633.46	6829.37	7633.11	7873.33	7959.83
9-Sep	4992.41	5269.45	5633.46	6829.37	7633.11	7873.33	7959.83
10-Sep	4992.41	5269.45	5633.46	6829.37	7633.11	7873.33	7959.83
11-Sep	4992.41	5269.45	5633.46	6829.37	7633.11	7873.33	7959.83
12-Sep	4992.41	5269.45	5633.46	6829.37	7633.11	7873.33	7959.83
13-Sep	4992.41	5269.45	5633.46	6829.37	7633.11	7873.33	7959.83
14-Sep	4992.41	5269.45	5633.46	6829.37	7633.11	7873.33	7959.83
15-Sep	4992.41	5269.45	5754.79	6829.37	7633.11	7873.33	8019.06
16-Sep	4992.41	5269.45	5754.79	6829.37	7633.11	7873.33	8019.06
17-Sep	4992.41	5269.45	5633.46	6829.37	7633.11	7873.33	7959.83
18-Sep	4992.41	5269.45	5633.46	6829.37	7633.11	7873.33	7959.83
19-Sep	4992.41	5269.45	5633.46	6829.37	7633.11	7873.33	7959.83
20-Sep	4992.41	5269.45	5633.46	6829.37	7633.11	7873.33	7959.83
21-Sep	5512.12	5876.13	6592.51	7517.31	7914.80	8190.45	8589.21
22-Sep	7790.38	7914.80	8190.45	8654.08	8783.81	8659.68	8566.59
23-Sep	7914.80	8019.06	8361.83	8697.32	8690.71	8597.62	8504.52
24-Sep	6118.80	6829.37	7285.72	7873.33	8276.14	8632.45	8675.70
25-Sep	6118.80	6829.37	7401.52	7873.33	8276.14	8632.45	8697.32
26-Sep	5463.86	5377.94	5292.01	5091.53	4919.69	4805.12	4747.84
27-Sep	2470.44	2456.53	2428.72	2380.05	2338.33	2310.52	2296.61
28-Sep	4637.00	4599.63	4562.25	4475.05	4400.30	4350.47	4325.55
29-Sep	7128.61	7031.53	6884.99	6588.26	6316.83	6152.76	6029.70
30-Sep	7433.97	7427.62	7392.46	7276.84	7221.87	7177.51	7175.58

Table A10. Summer 2002 allocation scenario time series results for the algae – midge guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	4693.26	4740.95	4777.97	4837.72	4527.31	4194.05	4111.08
2-Jun	6269.26	5366.51	5031.96	4629.67	4725.06	4775.36	4792.01
3-Jun	8755.12	9348.06	8317.04	5859.71	5031.96	4697.41	4645.57
4-Jun	9136.15	7907.49	6269.26	5115.60	4613.77	4677.36	4725.06
5-Jun	7497.93	6678.82	5366.51	4864.68	4677.36	4740.95	4772.75
6-Jun	4781.05	4629.67	4677.36	4775.36	4826.29	4777.25	4610.62
7-Jun	8726.60	7497.93	5859.71	5031.96	4629.67	4693.26	4740.95
8-Jun	7569.24	8162.18	8952.77	8317.04	5859.71	5199.24	4948.32
9-Jun	7093.02	7331.13	7964.53	9150.42	7497.93	6269.26	5366.51
10-Jun	6616.80	6973.96	7331.13	8557.48	9136.15	7497.93	6678.82
11-Jun	7165.48	7331.81	6854.91	7569.24	8755.12	9545.71	8317.04
12-Jun	7110.03	7276.37	6616.80	7450.19	8557.48	9348.06	9136.15
13-Jun	7212.07	7450.19	8162.18	9545.71	7088.37	5450.15	5282.87
14-Jun	5366.51	5199.24	4864.68	4661.46	4772.75	4792.01	4814.86
15-Jun	8359.83	8952.77	9545.71	6678.82	5199.24	4864.68	4697.41
16-Jun	7093.02	7331.13	7964.53	9150.42	7497.93	6269.26	5366.51
17-Jun	6616.80	6973.96	7331.13	8557.48	9136.15	7497.93	6678.82
18-Jun	7165.48	7331.81	6854.91	7569.24	8755.12	9545.71	8317.04
19-Jun	7110.03	7276.37	6616.80	7450.19	8557.48	9348.06	9136.15
20-Jun	6497.74	6735.85	7212.07	8359.83	9545.71	7907.49	7088.37
21-Jun	7220.92	6497.74	6973.96	7766.89	8952.77	9136.15	7907.49
22-Jun	7110.03	7276.37	6616.80	7450.19	8557.48	9348.06	9136.15
23-Jun	7719.68	7165.48	6497.74	7331.13	8359.83	9150.42	9545.71
24-Jun	9207.15	7719.68	7276.37	6973.96	7766.89	8557.48	9150.42
25-Jun	9694.85	8231.77	7220.92	6854.91	7569.24	8359.83	8952.77
26-Jun	9694.85	8231.77	7220.92	6854.91	7569.24	8359.83	8952.77
27-Jun	8359.83	8952.77	9545.71	6678.82	5199.24	4864.68	4697.41
28-Jun	9150.42	9545.71	7907.49	5450.15	4864.68	4613.77	4661.46
29-Jun	6497.74	6735.85	7212.07	8359.83	9545.71	7907.49	7088.37
30-Jun	7110.03	7276.37	6616.80	7450.19	8557.48	9348.06	9136.15
1-Jul	8231.77	7110.03	7331.81	7093.02	8162.18	8755.12	9348.06
2-Jul	9694.85	8231.77	7220.92	6854.91	7569.24	8359.83	8952.77
3-Jul	11026.83	9694.85	7719.68	6616.80	7331.13	7964.53	8359.83
4-Jul	11026.83	9694.85	7719.68	6616.80	7331.13	7964.53	8359.83
5-Jul	12715.42	11026.83	8719.46	7276.37	6973.96	7450.19	7964.53
6-Jul	15248.30	12715.42	10182.54	7165.48	6735.85	7212.07	7450.19
7-Jul	15923.48	14404.01	11026.83	7110.03	6616.80	7093.02	7331.13
8-Jul	15923.48	14404.01	11026.83	7110.03	6616.80	7093.02	7331.13
9-Jul	16579.88	15248.30	11871.13	8231.77	6497.74	6854.91	7212.07
10-Jul	15923.48	14404.01	11026.83	7110.03	6616.80	7093.02	7331.13
11-Jul	15248.30	12715.42	10182.54	7165.48	6735.85	7212.07	7450.19
12-Jul	15923.48	14404.01	11026.83	7110.03	6616.80	7093.02	7331.13
13-Jul	16579.88	15248.30	11871.13	8231.77	6497.74	6854.91	7212.07
14-Jul	11871.13	10182.54	8231.77	7331.81	7212.07	7569.24	8162.18

Table A10, continued. Summer 2002 allocation scenario time series results for the algae – midge guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	11026.83	9694.85	7719.68	6616.80	7331.13	7964.53	8359.83
16-Jul	12715.42	11026.83	8719.46	7276.37	6973.96	7450.19	7964.53
17-Jul	12715.42	11026.83	8719.46	7276.37	6973.96	7450.19	7964.53
18-Jul	14404.01	11871.13	9207.15	7220.92	6854.91	7331.13	7766.89
19-Jul	15248.30	12715.42	10182.54	7165.48	6735.85	7212.07	7450.19
20-Jul	15248.30	12715.42	10182.54	7165.48	6735.85	7212.07	7450.19
21-Jul	15923.48	14404.01	11026.83	7110.03	6616.80	7093.02	7331.13
22-Jul	15923.48	14404.01	11026.83	7110.03	6616.80	7093.02	7331.13
23-Jul	16579.88	15248.30	11871.13	8231.77	6497.74	6854.91	7212.07
24-Jul	8231.77	7110.03	7331.81	7093.02	8162.18	8755.12	9348.06
25-Jul	7719.68	7165.48	6497.74	7331.13	8359.83	9150.42	9545.71
26-Jul	8231.77	7110.03	7331.81	7093.02	8162.18	8755.12	9348.06
27-Jul	7331.13	7766.89	8359.83	9136.15	6678.82	5366.51	5199.24
28-Jul	7165.48	7331.81	6854.91	7569.24	8755.12	9545.71	8317.04
29-Jul	9694.85	8231.77	7220.92	6854.91	7569.24	8359.83	8952.77
30-Jul	11871.13	10182.54	8231.77	7331.81	7212.07	7569.24	8162.18
31-Jul	15248.30	12715.42	10182.54	7165.48	6735.85	7212.07	7450.19
1-Aug	15923.48	14404.01	11026.83	7110.03	6616.80	7093.02	7331.13
2-Aug	16579.88	15248.30	11871.13	8231.77	6497.74	6854.91	7212.07
3-Aug	17892.66	15923.48	12715.42	8719.46	7276.37	6735.85	7093.02
4-Aug	17907.68	16579.88	14404.01	9207.15	7220.92	6616.80	6854.91
5-Aug	17922.70	17236.27	14404.01	9694.85	7165.48	6497.74	6854.91
6-Aug	17937.72	17892.66	15248.30	10182.54	7110.03	7331.81	6735.85
7-Aug	17937.72	17892.66	15923.48	10182.54	7110.03	7331.81	6616.80
8-Aug	17952.75	17907.68	16579.88	11026.83	7719.68	7276.37	6497.74
9-Aug	17952.75	17922.70	16579.88	11871.13	7719.68	7220.92	6497.74
10-Aug	17967.77	17922.70	16579.88	11871.13	8231.77	7220.92	6497.74
11-Aug	17967.77	17937.72	17236.27	12715.42	8231.77	7165.48	7331.81
12-Aug	17982.79	17937.72	17236.27	12715.42	8719.46	7165.48	7331.81
13-Aug	17982.79	17952.75	17892.66	12715.42	8719.46	7165.48	7276.37
14-Aug	17982.79	17952.75	17892.66	13559.71	8719.46	7110.03	7276.37
15-Aug	17997.81	17952.75	17892.66	13559.71	9207.15	7110.03	7276.37
16-Aug	17997.81	17952.75	17892.66	13559.71	9207.15	7110.03	7276.37
17-Aug	17997.81	17952.75	17907.68	13559.71	9207.15	7110.03	7220.92
18-Aug	17997.81	17967.77	17907.68	14404.01	9207.15	7719.68	7220.92
19-Aug	18282.76	17967.77	17907.68	14404.01	9694.85	7719.68	7220.92
20-Aug	18282.76	17967.77	17907.68	14404.01	9694.85	7719.68	7220.92
21-Aug	18282.76	17967.77	17922.70	14404.01	9694.85	7719.68	7165.48
22-Aug	18282.76	17967.77	17922.70	14404.01	9694.85	7719.68	7165.48
23-Aug	18282.76	17982.79	17922.70	14404.01	9694.85	7719.68	7165.48
24-Aug	18282.76	17982.79	17922.70	15248.30	9694.85	8231.77	7165.48
25-Aug	18837.63	17982.79	17922.70	15248.30	10182.54	8231.77	7165.48
26-Aug	18837.63	17982.79	17922.70	15248.30	10182.54	8231.77	7165.48
27-Aug	18837.63	17982.79	17937.72	15248.30	10182.54	8231.77	7110.03

Table A10, continued. Summer 2002 allocation scenario time series results for the algae – midge guild at the Plains Mill study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Microhabitat Index						
	Site Q	+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	18837.63	17982.79	17937.72	15248.30	10182.54	8231.77	7110.03
29-Aug	18837.63	17982.79	17937.72	15248.30	10182.54	8231.77	7110.03
30-Aug	18837.63	17982.79	17937.72	15248.30	10182.54	8231.77	7110.03
31-Aug	18837.63	17997.81	17937.72	15248.30	10182.54	8231.77	7110.03
1-Sep	18837.63	17997.81	17937.72	15923.48	10182.54	8231.77	7110.03
2-Sep	19392.50	17997.81	17937.72	15923.48	11026.83	8719.46	7110.03
3-Sep	19392.50	17997.81	17937.72	15923.48	11026.83	8719.46	7110.03
4-Sep	19392.50	17997.81	17937.72	15923.48	11026.83	8719.46	7110.03
5-Sep	19392.50	17997.81	17952.75	15923.48	11026.83	8719.46	7719.68
6-Sep	19392.50	17997.81	17952.75	15923.48	11026.83	8719.46	7719.68
7-Sep	19392.50	17997.81	17952.75	15923.48	11026.83	8719.46	7719.68
8-Sep	19392.50	17997.81	17952.75	15923.48	11026.83	8719.46	7719.68
9-Sep	19392.50	17997.81	17952.75	15923.48	11026.83	8719.46	7719.68
10-Sep	19392.50	17997.81	17952.75	15923.48	11026.83	8719.46	7719.68
11-Sep	19392.50	17997.81	17952.75	15923.48	11026.83	8719.46	7719.68
12-Sep	19392.50	17997.81	17952.75	15923.48	11026.83	8719.46	7719.68
13-Sep	19392.50	17997.81	17952.75	15923.48	11026.83	8719.46	7719.68
14-Sep	19392.50	17997.81	17952.75	15923.48	11026.83	8719.46	7719.68
15-Sep	19392.50	17997.81	17937.72	15923.48	11026.83	8719.46	7110.03
16-Sep	19392.50	17997.81	17937.72	15923.48	11026.83	8719.46	7110.03
17-Sep	19392.50	17997.81	17952.75	15923.48	11026.83	8719.46	7719.68
18-Sep	19392.50	17997.81	17952.75	15923.48	11026.83	8719.46	7719.68
19-Sep	19392.50	17997.81	17952.75	15923.48	11026.83	8719.46	7719.68
20-Sep	19392.50	17997.81	17952.75	15923.48	11026.83	8719.46	7719.68
21-Sep	17967.77	17922.70	16579.88	11871.13	8231.77	7220.92	6497.74
22-Sep	9694.85	8231.77	7220.92	6854.91	7569.24	8359.83	8952.77
23-Sep	8231.77	7110.03	7331.81	7093.02	8162.18	8755.12	9348.06
24-Sep	17892.66	15923.48	13559.71	8719.46	7276.37	6735.85	6973.96
25-Sep	17892.66	15923.48	12715.42	8719.46	7276.37	6735.85	7093.02
26-Sep	4591.38	4368.05	4144.72	3623.61	3176.94	2879.16	2730.27
27-Sep	2104.12	2094.04	2073.87	2038.58	2008.33	1988.16	1978.08
28-Sep	2503.17	2497.51	2491.85	2478.65	2467.33	2459.79	2456.02
29-Sep	4736.03	4794.69	4822.63	4638.39	4206.30	3753.01	3413.04
30-Sep	4814.86	4849.14	4693.94	4110.73	4450.53	4722.08	4776.76

Table A11. Summer 1999 allocation scenario time series results for the riffle guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	8807.05	8825.56	8850.24	8638.29	8384.53	8241.98	8170.70
2-Jun	8794.70	8807.05	8825.56	8769.16	8507.42	8348.89	8277.62
3-Jun	8794.67	8794.68	8794.70	8825.56	8769.16	8638.29	8507.42
4-Jun	8909.57	8840.62	8794.66	8794.70	8819.39	8844.07	8812.79
5-Jun	8978.52	8909.57	8840.62	8794.68	8800.88	8825.56	8837.90
6-Jun	9024.49	8955.54	8886.59	8794.67	8794.70	8813.22	8825.56
7-Jun	8912.94	9024.49	8932.56	8794.66	8794.69	8800.88	8813.22
8-Jun	8689.83	8801.38	9024.49	8886.59	8794.67	8794.69	8794.70
9-Jun	8332.22	8530.59	8801.38	8978.52	8840.62	8794.66	8794.68
10-Jun	8196.85	8298.37	8530.59	8912.94	8932.56	8840.62	8794.65
11-Jun	8061.47	8129.16	8264.53	8689.83	9024.49	8932.56	8886.59
12-Jun	8095.32	8196.85	8298.37	8745.60	9001.51	8909.57	8863.60
13-Jun	8196.85	8298.37	8530.59	8912.94	8932.56	8840.62	8794.65
14-Jun	8196.85	8298.37	8530.59	8912.94	8932.56	8840.62	8794.65
15-Jun	8095.32	8196.85	8298.37	8745.60	9001.51	8909.57	8863.60
16-Jun	7964.14	8061.47	8196.85	8448.33	8912.94	8978.52	8932.56
17-Jun	8129.16	8230.69	8332.22	8801.38	8978.52	8886.59	8840.62
18-Jun	8366.06	8612.86	8857.16	8955.54	8817.64	8794.67	8794.69
19-Jun	8230.69	8332.22	8612.86	8968.71	8909.57	8817.64	8794.66
20-Jun	8095.32	8196.85	8298.37	8745.60	9001.51	8909.57	8863.60
21-Jun	8129.16	8230.69	8332.22	8801.38	8978.52	8886.59	8840.62
22-Jun	8163.00	8264.53	8366.06	8857.16	8955.54	8863.60	8817.64
23-Jun	7900.65	8027.63	8163.00	8366.06	8857.16	9001.51	8955.54
24-Jun	7519.71	7710.18	7964.14	8196.85	8448.33	8745.60	8912.94
25-Jun	7456.22	7646.69	7900.65	8163.00	8366.06	8689.83	8857.16
26-Jun	7349.84	7519.71	7773.67	8095.32	8298.37	8530.59	8745.60
27-Jun	7306.94	7456.22	7710.18	8061.47	8264.53	8448.33	8689.83
28-Jun	7306.94	7456.22	7710.18	8061.47	8264.53	8448.33	8689.83
29-Jun	7221.15	7349.84	7519.71	7964.14	8196.85	8332.22	8448.33
30-Jun	7221.15	7349.84	7519.71	7964.14	8196.85	8332.22	8448.33
1-Jul	7221.15	7349.84	7519.71	7964.14	8196.85	8332.22	8448.33
2-Jul	7264.05	7392.73	7646.69	8027.63	8230.69	8366.06	8612.86
3-Jul	7837.16	7964.14	8129.16	8332.22	8801.38	8968.71	8978.52
4-Jul	7456.22	7646.69	7900.65	8163.00	8366.06	8689.83	8857.16
5-Jul	7264.05	7392.73	7646.69	8027.63	8230.69	8366.06	8612.86
6-Jul	7135.37	7264.05	7392.73	7837.16	8129.16	8264.53	8332.22
7-Jul	7006.68	7135.37	7306.94	7646.69	8027.63	8163.00	8264.53
8-Jul	7006.68	7135.37	7306.94	7646.69	8027.63	8163.00	8264.53
9-Jul	7049.58	7178.26	7349.84	7710.18	8061.47	8196.85	8298.37
10-Jul	6963.79	7092.47	7264.05	7583.20	7964.14	8129.16	8230.69
11-Jul	6963.79	7049.58	7221.15	7583.20	7964.14	8129.16	8196.85
12-Jul	6926.07	7049.58	7221.15	7519.71	7900.65	8095.32	8196.85
13-Jul	7049.58	7135.37	7306.94	7646.69	8061.47	8163.00	8264.53
14-Jul	7049.58	7178.26	7306.94	7710.18	8061.47	8196.85	8264.53

Table A11, continued. Summer 1999 allocation scenario time series results for the riffle guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	7006.68	7092.47	7264.05	7583.20	8027.63	8163.00	8230.69
16-Jul	7049.58	7135.37	7306.94	7646.69	8061.47	8163.00	8264.53
17-Jul	7006.68	7092.47	7264.05	7583.20	8027.63	8129.16	8230.69
18-Jul	6963.79	7092.47	7264.05	7583.20	7964.14	8129.16	8230.69
19-Jul	6926.07	7049.58	7178.26	7519.71	7900.65	8095.32	8163.00
20-Jul	6888.36	7006.68	7178.26	7456.22	7837.16	8061.47	8163.00
21-Jul	7349.84	7519.71	7773.67	8095.32	8298.37	8530.59	8745.60
22-Jul	7221.15	7349.84	7519.71	7964.14	8196.85	8332.22	8448.33
23-Jul	7049.58	7178.26	7349.84	7710.18	8061.47	8196.85	8298.37
24-Jul	6926.07	7049.58	7178.26	7519.71	7900.65	8095.32	8163.00
25-Jul	6926.07	7049.58	7221.15	7519.71	7900.65	8095.32	8196.85
26-Jul	6926.07	7049.58	7178.26	7519.71	7900.65	8095.32	8163.00
27-Jul	6926.07	7006.68	7178.26	7456.22	7900.65	8095.32	8163.00
28-Jul	7092.47	7221.15	7349.84	7773.67	8095.32	8230.69	8298.37
29-Jul	7092.47	7221.15	7392.73	7773.67	8095.32	8230.69	8332.22
30-Jul	7049.58	7135.37	7306.94	7646.69	8061.47	8163.00	8264.53
31-Jul	7006.68	7135.37	7264.05	7646.69	8027.63	8163.00	8230.69
1-Aug	7092.47	7221.15	7392.73	7773.67	8095.32	8230.69	8332.22
2-Aug	7092.47	7221.15	7349.84	7773.67	8095.32	8230.69	8298.37
3-Aug	7006.68	7135.37	7264.05	7646.69	8027.63	8163.00	8230.69
4-Aug	6963.79	7049.58	7221.15	7519.71	7964.14	8129.16	8196.85
5-Aug	6926.07	7006.68	7178.26	7456.22	7900.65	8095.32	8163.00
6-Aug	6888.36	6963.79	7135.37	7392.73	7837.16	8061.47	8129.16
7-Aug	6850.64	6926.07	7092.47	7349.84	7773.67	8027.63	8095.32
8-Aug	6812.92	6926.07	7049.58	7349.84	7710.18	7964.14	8061.47
9-Aug	6850.64	6926.07	7092.47	7349.84	7773.67	8027.63	8095.32
10-Aug	6888.36	7006.68	7135.37	7456.22	7837.16	8061.47	8129.16
11-Aug	6850.64	6926.07	7092.47	7349.84	7773.67	7964.14	8095.32
12-Aug	6812.92	6888.36	7049.58	7306.94	7710.18	7964.14	8061.47
13-Aug	6775.21	6888.36	7049.58	7306.94	7646.69	7900.65	8061.47
14-Aug	6926.07	7049.58	7221.15	7519.71	7900.65	8095.32	8196.85
15-Aug	7049.58	7135.37	7306.94	7646.69	8061.47	8163.00	8264.53
16-Aug	6926.07	7006.68	7178.26	7519.71	7900.65	8095.32	8163.00
17-Aug	6926.07	7049.58	7221.15	7519.71	7900.65	8095.32	8196.85
18-Aug	6850.64	6963.79	7135.37	7392.73	7773.67	8027.63	8129.16
19-Aug	6850.64	6963.79	7135.37	7392.73	7773.67	8027.63	8129.16
20-Aug	8800.88	8819.39	8837.90	8681.91	8420.17	8277.62	8206.34
21-Aug	8794.66	8794.67	8794.69	8813.22	8856.41	8725.54	8594.67
22-Aug	8794.67	8794.68	8794.70	8825.56	8769.16	8638.29	8507.42
23-Aug	8163.00	8264.53	8366.06	8857.16	8955.54	8863.60	8817.64
24-Aug	7773.67	7900.65	8095.32	8298.37	8745.60	8912.94	9001.51
25-Aug	7837.16	7964.14	8129.16	8332.22	8801.38	8968.71	8978.52
26-Aug	8063.79	8009.27	7900.24	7732.88	7528.78	7484.35	7461.46
27-Aug	7587.09	7528.78	7476.72	7430.92	7467.75	7489.98	7382.86

Table A11, continued. Summer 1999 allocation scenario time series results for the riffle guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	8063.79	8009.27	7900.24	7732.88	7528.78	7484.35	7461.46
29-Aug	8807.05	8825.56	8850.24	8638.29	8384.53	8241.98	8170.70
30-Aug	8978.52	8909.57	8840.62	8794.68	8800.88	8825.56	8837.90
31-Aug	8366.06	8612.86	8857.16	8955.54	8817.64	8794.67	8794.69
1-Sep	8230.69	8332.22	8612.86	8968.71	8909.57	8817.64	8794.66
2-Sep	8095.32	8196.85	8298.37	8745.60	9001.51	8909.57	8863.60
3-Sep	7900.65	8027.63	8163.00	8366.06	8857.16	9001.51	8955.54
4-Sep	7900.65	8027.63	8163.00	8366.06	8857.16	9001.51	8955.54
5-Sep	8856.41	8769.16	8594.67	8348.89	8099.43	8009.27	7927.50
6-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	174.40	172.18	169.95	164.77	160.32	157.36	155.88
10-Sep	1369.03	1336.16	1292.34	1226.61	1160.88	1117.06	1084.19
11-Sep	3136.72	3079.47	3003.14	2888.64	2774.14	2697.80	2640.55
12-Sep	4829.82	4770.39	4651.55	4473.27	4265.29	4176.15	4087.02
13-Sep	6252.87	6146.79	6005.34	5793.17	5580.99	5439.55	5333.46
14-Sep	7325.60	7153.81	6982.01	6712.58	6500.41	6358.96	6288.23
15-Sep	7482.57	7497.39	7268.33	6924.75	6677.22	6535.77	6465.04
16-Sep	663.35	647.23	625.74	593.50	561.26	539.77	529.02
17-Sep	1325.21	1303.30	1259.48	1193.74	1117.06	1084.19	1051.32
18-Sep	3384.80	3346.64	3270.30	3155.80	3022.22	2964.97	2907.72
19-Sep	4473.27	4384.14	4265.29	4087.02	3908.75	3789.90	3700.76
20-Sep	5192.01	5097.23	5008.09	4800.11	4621.83	4502.99	4443.56
21-Sep	276.49	260.37	244.25	206.64	174.40	171.44	169.95
22-Sep	129.20	126.98	124.01	119.57	115.12	112.16	109.93
23-Sep	722.67	706.34	684.84	652.61	614.99	598.87	582.76
24-Sep	2048.97	1991.72	1915.39	1827.60	1763.42	1719.60	1686.73
25-Sep	3346.64	3308.47	3232.14	3117.64	2984.05	2907.72	2869.55
26-Sep	4502.99	4413.85	4295.00	4116.73	3938.46	3819.61	3730.47
27-Sep	5439.55	5368.82	5227.37	5037.80	4829.82	4740.68	4651.55
28-Sep	4532.70	4443.56	4324.71	4146.44	3968.17	3849.32	3760.19
29-Sep	4859.53	4800.11	4681.26	4502.99	4295.00	4205.87	4116.73
30-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table A12. Summer 1999 allocation scenario time series results for the fast generalist guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	7390.49	7477.94	7594.54	7569.15	7522.32	7553.18	7568.60
2-Jun	7367.52	7390.49	7477.94	7601.87	7536.43	7530.04	7545.46
3-Jun	7579.48	7508.83	7367.52	7477.94	7601.87	7569.15	7536.43
4-Jun	7874.46	7761.06	7614.81	7402.84	7448.79	7565.39	7612.78
5-Jun	7987.86	7874.46	7761.06	7508.83	7361.34	7477.94	7536.24
6-Jun	8063.46	7950.06	7836.66	7579.48	7367.52	7419.64	7477.94
7-Jun	7837.50	8063.46	7912.26	7650.13	7438.17	7361.34	7419.64
8-Jun	7385.58	7611.54	8063.46	7836.66	7579.48	7473.50	7367.52
9-Jun	6744.19	7049.08	7611.54	7987.86	7761.06	7614.81	7508.83
10-Jun	6919.74	6788.08	7049.08	7837.50	7912.26	7761.06	7685.46
11-Jun	7095.29	7007.52	6831.96	7385.58	8063.46	7912.26	7836.66
12-Jun	7051.40	6919.74	6788.08	7498.56	8025.66	7874.46	7798.86
13-Jun	6919.74	6788.08	7049.08	7837.50	7912.26	7761.06	7685.46
14-Jun	6919.74	6788.08	7049.08	7837.50	7912.26	7761.06	7685.46
15-Jun	7051.40	6919.74	6788.08	7498.56	8025.66	7874.46	7798.86
16-Jun	7114.03	7095.29	6919.74	6874.69	7837.50	7987.86	7912.26
17-Jun	7007.52	6875.85	6744.19	7611.54	7987.86	7836.66	7761.06
18-Jun	6700.30	7223.47	7724.52	7950.06	7723.26	7579.48	7473.50
19-Jun	6875.85	6744.19	7223.47	7950.48	7874.46	7723.26	7614.81
20-Jun	7051.40	6919.74	6788.08	7498.56	8025.66	7874.46	7798.86
21-Jun	7007.52	6875.85	6744.19	7611.54	7987.86	7836.66	7761.06
22-Jun	6963.63	6831.96	6700.30	7724.52	7950.06	7798.86	7723.26
23-Jun	7088.88	7139.18	6963.63	6700.30	7724.52	8025.66	7950.06
24-Jun	6937.96	7013.42	7114.03	6919.74	6874.69	7498.56	7837.50
25-Jun	6912.81	6988.27	7088.88	6963.63	6700.30	7385.58	7724.52
26-Jun	6769.63	6937.96	7038.57	7051.40	6788.08	7049.08	7498.56
27-Jun	6651.61	6912.81	7013.42	7095.29	6831.96	6874.69	7385.58
28-Jun	6651.61	6912.81	7013.42	7095.29	6831.96	6874.69	7385.58
29-Jun	6415.55	6769.63	6937.96	7114.03	6919.74	6744.19	6874.69
30-Jun	6415.55	6769.63	6937.96	7114.03	6919.74	6744.19	6874.69
1-Jul	6415.55	6769.63	6937.96	7114.03	6919.74	6744.19	6874.69
2-Jul	6533.58	6887.66	6988.27	7139.18	6875.85	6700.30	7223.47
3-Jul	7063.72	7114.03	7007.52	6744.19	7611.54	7950.48	7987.86
4-Jul	6912.81	6988.27	7088.88	6963.63	6700.30	7385.58	7724.52
5-Jul	6533.58	6887.66	6988.27	7139.18	6875.85	6700.30	7223.47
6-Jul	6179.50	6533.58	6887.66	7063.72	7007.52	6831.96	6744.19
7-Jul	5825.42	6179.50	6651.61	6988.27	7139.18	6963.63	6831.96
8-Jul	5825.42	6179.50	6651.61	6988.27	7139.18	6963.63	6831.96
9-Jul	5943.44	6297.53	6769.63	7013.42	7095.29	6919.74	6788.08
10-Jul	5707.39	6061.47	6533.58	6963.12	7114.03	7007.52	6875.85
11-Jul	5707.39	5943.44	6415.55	6963.12	7114.03	7007.52	6919.74
12-Jul	5656.56	5943.44	6415.55	6937.96	7088.88	7051.40	6919.74
13-Jul	5943.44	6179.50	6651.61	6988.27	7095.29	6963.63	6831.96
14-Jul	5943.44	6297.53	6651.61	7013.42	7095.29	6919.74	6831.96

Table A12, continued. Summer 1999 allocation scenario time series results for the fast generalist guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	5825.42	6061.47	6533.58	6963.12	7139.18	6963.63	6875.85
16-Jul	5943.44	6179.50	6651.61	6988.27	7095.29	6963.63	6831.96
17-Jul	5825.42	6061.47	6533.58	6963.12	7139.18	7007.52	6875.85
18-Jul	5707.39	6061.47	6533.58	6963.12	7114.03	7007.52	6875.85
19-Jul	5656.56	5943.44	6297.53	6937.96	7088.88	7051.40	6963.63
20-Jul	5605.72	5825.42	6297.53	6912.81	7063.72	7095.29	6963.63
21-Jul	6769.63	6937.96	7038.57	7051.40	6788.08	7049.08	7498.56
22-Jul	6415.55	6769.63	6937.96	7114.03	6919.74	6744.19	6874.69
23-Jul	5943.44	6297.53	6769.63	7013.42	7095.29	6919.74	6788.08
24-Jul	5656.56	5943.44	6297.53	6937.96	7088.88	7051.40	6963.63
25-Jul	5656.56	5943.44	6415.55	6937.96	7088.88	7051.40	6919.74
26-Jul	5656.56	5943.44	6297.53	6937.96	7088.88	7051.40	6963.63
27-Jul	5656.56	5825.42	6297.53	6912.81	7088.88	7051.40	6963.63
28-Jul	6061.47	6415.55	6769.63	7038.57	7051.40	6875.85	6788.08
29-Jul	6061.47	6415.55	6887.66	7038.57	7051.40	6875.85	6744.19
30-Jul	5943.44	6179.50	6651.61	6988.27	7095.29	6963.63	6831.96
31-Jul	5825.42	6179.50	6533.58	6988.27	7139.18	6963.63	6875.85
1-Aug	6061.47	6415.55	6887.66	7038.57	7051.40	6875.85	6744.19
2-Aug	6061.47	6415.55	6769.63	7038.57	7051.40	6875.85	6788.08
3-Aug	5825.42	6179.50	6533.58	6988.27	7139.18	6963.63	6875.85
4-Aug	5707.39	5943.44	6415.55	6937.96	7114.03	7007.52	6919.74
5-Aug	5656.56	5825.42	6297.53	6912.81	7088.88	7051.40	6963.63
6-Aug	5605.72	5707.39	6179.50	6887.66	7063.72	7095.29	7007.52
7-Aug	5554.89	5656.56	6061.47	6769.63	7038.57	7139.18	7051.40
8-Aug	5504.05	5656.56	5943.44	6769.63	7013.42	7114.03	7095.29
9-Aug	5554.89	5656.56	6061.47	6769.63	7038.57	7139.18	7051.40
10-Aug	5605.72	5825.42	6179.50	6912.81	7063.72	7095.29	7007.52
11-Aug	5554.89	5656.56	6061.47	6769.63	7038.57	7114.03	7051.40
12-Aug	5504.05	5605.72	5943.44	6651.61	7013.42	7114.03	7095.29
13-Aug	5453.22	5605.72	5943.44	6651.61	6988.27	7088.88	7095.29
14-Aug	5656.56	5943.44	6415.55	6937.96	7088.88	7051.40	6919.74
15-Aug	5943.44	6179.50	6651.61	6988.27	7095.29	6963.63	6831.96
16-Aug	5656.56	5825.42	6297.53	6937.96	7088.88	7051.40	6963.63
17-Aug	5656.56	5943.44	6415.55	6937.96	7088.88	7051.40	6919.74
18-Aug	5554.89	5707.39	6179.50	6887.66	7038.57	7139.18	7007.52
19-Aug	5554.89	5707.39	6179.50	6887.66	7038.57	7139.18	7007.52
20-Aug	7361.34	7448.79	7536.24	7580.06	7514.61	7545.46	7560.89
21-Aug	7650.13	7579.48	7438.17	7419.64	7623.69	7590.97	7558.24
22-Aug	7579.48	7508.83	7367.52	7477.94	7601.87	7569.15	7536.43
23-Aug	6963.63	6831.96	6700.30	7724.52	7950.06	7798.86	7723.26
24-Aug	7038.57	7088.88	7051.40	6788.08	7498.56	7837.50	8025.66
25-Aug	7063.72	7114.03	7007.52	6744.19	7611.54	7950.48	7987.86
26-Aug	7591.74	7549.00	7463.51	7347.49	7240.60	7174.43	7098.07
27-Aug	7271.14	7240.60	7148.97	6996.26	6917.60	6890.99	6889.03

Table A12, continued. Summer 1999 allocation scenario time series results for the fast generalist guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	7591.74	7549.00	7463.51	7347.49	7240.60	7174.43	7098.07
29-Aug	7390.49	7477.94	7594.54	7569.15	7522.32	7553.18	7568.60
30-Aug	7987.86	7874.46	7761.06	7508.83	7361.34	7477.94	7536.24
31-Aug	6700.30	7223.47	7724.52	7950.06	7723.26	7579.48	7473.50
1-Sep	6875.85	6744.19	7223.47	7950.48	7874.46	7723.26	7614.81
2-Sep	7051.40	6919.74	6788.08	7498.56	8025.66	7874.46	7798.86
3-Sep	7088.88	7139.18	6963.63	6700.30	7724.52	8025.66	7950.06
4-Sep	7088.88	7139.18	6963.63	6700.30	7724.52	8025.66	7950.06
5-Sep	7623.69	7601.87	7558.24	7530.04	7584.03	7549.00	7484.89
6-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	151.20	149.72	148.24	144.78	141.81	139.84	138.85
10-Sep	864.95	849.88	829.78	799.65	769.51	749.41	734.34
11-Sep	3371.69	3271.87	3138.77	2939.11	2739.46	2606.36	2506.53
12-Sep	5611.56	5544.47	5410.30	5209.05	4974.25	4873.63	4773.00
13-Sep	6560.94	6504.77	6429.88	6317.54	6205.20	6130.31	6074.14
14-Sep	6892.49	6902.86	6913.22	6804.34	6692.00	6617.11	6579.66
15-Sep	6899.86	6882.12	6895.94	6916.68	6785.62	6710.73	6673.28
16-Sep	526.44	514.07	497.57	472.83	448.09	431.60	423.35
17-Sep	844.85	834.81	814.72	784.58	749.41	734.34	719.27
18-Sep	3804.28	3737.73	3604.62	3404.97	3172.04	3072.21	2972.39
19-Sep	5209.05	5108.42	4974.25	4773.00	4571.75	4437.58	4336.95
20-Sep	5999.24	5913.44	5812.81	5578.01	5376.76	5242.59	5175.51
21-Sep	229.55	217.18	204.81	175.94	151.20	149.22	148.24
22-Sep	121.07	119.58	117.61	114.64	111.68	109.70	108.22
23-Sep	568.57	559.43	542.93	518.19	489.33	476.96	464.59
24-Sep	1474.99	1375.16	1242.06	1096.42	1045.79	1025.69	1010.62
25-Sep	3737.73	3671.17	3538.07	3338.42	3105.49	2972.39	2905.84
26-Sep	5242.59	5141.97	5007.80	4806.54	4605.29	4471.12	4370.50
27-Sep	6130.31	6092.86	6017.97	5846.35	5611.56	5510.93	5410.30
28-Sep	5276.13	5175.51	5041.34	4840.09	4638.83	4504.66	4404.04
29-Sep	5645.10	5578.01	5443.85	5242.59	5007.80	4907.17	4806.54
30-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table A13. Summer 1999 allocation scenario time series results for the pool – run guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	9664.09	9801.81	9985.43	10037.52	10071.07	10180.55	10235.29
2-Jun	9584.01	9664.09	9801.81	10033.80	10041.23	10098.44	10153.18
3-Jun	9654.40	9630.94	9584.01	9801.81	10033.80	10037.52	10041.23
4-Jun	9746.63	9712.41	9666.13	9595.74	9755.90	9939.52	10032.57
5-Jun	9780.85	9746.63	9712.41	9630.94	9618.19	9801.81	9893.62
6-Jun	9803.67	9769.45	9735.22	9654.40	9584.01	9710.00	9801.81
7-Jun	9663.26	9803.67	9758.04	9677.86	9607.47	9618.19	9710.00
8-Jun	9382.44	9522.85	9803.67	9735.22	9654.40	9619.20	9584.01
9-Jun	8552.05	9000.79	9522.85	9780.85	9712.41	9666.13	9630.94
10-Jun	8390.94	8511.77	9000.79	9663.26	9758.04	9712.41	9689.59
11-Jun	8229.83	8310.38	8471.50	9382.44	9803.67	9758.04	9735.22
12-Jun	8270.11	8390.94	8511.77	9452.65	9792.26	9746.63	9723.81
13-Jun	8390.94	8511.77	9000.79	9663.26	9758.04	9712.41	9689.59
14-Jun	8390.94	8511.77	9000.79	9663.26	9758.04	9712.41	9689.59
15-Jun	8270.11	8390.94	8511.77	9452.65	9792.26	9746.63	9723.81
16-Jun	8177.69	8229.83	8390.94	8796.56	9663.26	9780.85	9758.04
17-Jun	8310.38	8431.22	8552.05	9522.85	9780.85	9735.22	9712.41
18-Jun	8592.33	9205.02	9593.06	9769.45	9701.00	9654.40	9619.20
19-Jun	8431.22	8552.05	9205.02	9733.47	9746.63	9701.00	9666.13
20-Jun	8270.11	8390.94	8511.77	9452.65	9792.26	9746.63	9723.81
21-Jun	8310.38	8431.22	8552.05	9522.85	9780.85	9735.22	9712.41
22-Jun	8350.66	8471.50	8592.33	9593.06	9769.45	9723.81	9701.00
23-Jun	8165.83	8189.55	8350.66	8592.33	9593.06	9792.26	9769.45
24-Jun	8094.68	8130.26	8177.69	8390.94	8796.56	9452.65	9663.26
25-Jun	8082.82	8118.40	8165.83	8350.66	8592.33	9382.44	9593.06
26-Jun	7967.85	8094.68	8142.11	8270.11	8511.77	9000.79	9452.65
27-Jun	7864.74	8082.82	8130.26	8229.83	8471.50	8796.56	9382.44
28-Jun	7864.74	8082.82	8130.26	8229.83	8471.50	8796.56	9382.44
29-Jun	7658.53	7967.85	8094.68	8177.69	8390.94	8552.05	8796.56
30-Jun	7658.53	7967.85	8094.68	8177.69	8390.94	8552.05	8796.56
1-Jul	7658.53	7967.85	8094.68	8177.69	8390.94	8552.05	8796.56
2-Jul	7761.64	8070.96	8118.40	8189.55	8431.22	8592.33	9205.02
3-Jul	8153.97	8177.69	8310.38	8552.05	9522.85	9733.47	9780.85
4-Jul	8082.82	8118.40	8165.83	8350.66	8592.33	9382.44	9593.06
5-Jul	7761.64	8070.96	8118.40	8189.55	8431.22	8592.33	9205.02
6-Jul	7452.31	7761.64	8070.96	8153.97	8310.38	8471.50	8552.05
7-Jul	7142.99	7452.31	7864.74	8118.40	8189.55	8350.66	8471.50
8-Jul	7142.99	7452.31	7864.74	8118.40	8189.55	8350.66	8471.50
9-Jul	7246.10	7555.42	7967.85	8130.26	8229.83	8390.94	8511.77
10-Jul	7039.88	7349.20	7761.64	8106.54	8177.69	8310.38	8431.22
11-Jul	7039.88	7246.10	7658.53	8106.54	8177.69	8310.38	8390.94
12-Jul	6972.60	7246.10	7658.53	8094.68	8165.83	8270.11	8390.94
13-Jul	7246.10	7452.31	7864.74	8118.40	8229.83	8350.66	8471.50
14-Jul	7246.10	7555.42	7864.74	8130.26	8229.83	8390.94	8471.50

Table A13, continued. Summer 1999 allocation scenario time series results for the pool – run guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Microhabitat Index						
	Site Q	+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	7142.99	7349.20	7761.64	8106.54	8189.55	8350.66	8431.22
16-Jul	7246.10	7452.31	7864.74	8118.40	8229.83	8350.66	8471.50
17-Jul	7142.99	7349.20	7761.64	8106.54	8189.55	8310.38	8431.22
18-Jul	7039.88	7349.20	7761.64	8106.54	8177.69	8310.38	8431.22
19-Jul	6972.60	7246.10	7555.42	8094.68	8165.83	8270.11	8350.66
20-Jul	6905.31	7142.99	7555.42	8082.82	8153.97	8229.83	8350.66
21-Jul	7967.85	8094.68	8142.11	8270.11	8511.77	9000.79	9452.65
22-Jul	7658.53	7967.85	8094.68	8177.69	8390.94	8552.05	8796.56
23-Jul	7246.10	7555.42	7967.85	8130.26	8229.83	8390.94	8511.77
24-Jul	6972.60	7246.10	7555.42	8094.68	8165.83	8270.11	8350.66
25-Jul	6972.60	7246.10	7658.53	8094.68	8165.83	8270.11	8390.94
26-Jul	6972.60	7246.10	7555.42	8094.68	8165.83	8270.11	8350.66
27-Jul	6972.60	7142.99	7555.42	8082.82	8165.83	8270.11	8350.66
28-Jul	7349.20	7658.53	7967.85	8142.11	8270.11	8431.22	8511.77
29-Jul	7349.20	7658.53	8070.96	8142.11	8270.11	8431.22	8552.05
30-Jul	7246.10	7452.31	7864.74	8118.40	8229.83	8350.66	8471.50
31-Jul	7142.99	7452.31	7761.64	8118.40	8189.55	8350.66	8431.22
1-Aug	7349.20	7658.53	8070.96	8142.11	8270.11	8431.22	8552.05
2-Aug	7349.20	7658.53	7967.85	8142.11	8270.11	8431.22	8511.77
3-Aug	7142.99	7452.31	7761.64	8118.40	8189.55	8350.66	8431.22
4-Aug	7039.88	7246.10	7658.53	8094.68	8177.69	8310.38	8390.94
5-Aug	6972.60	7142.99	7555.42	8082.82	8165.83	8270.11	8350.66
6-Aug	6905.31	7039.88	7452.31	8070.96	8153.97	8229.83	8310.38
7-Aug	6838.03	6972.60	7349.20	7967.85	8142.11	8189.55	8270.11
8-Aug	6770.75	6972.60	7246.10	7967.85	8130.26	8177.69	8229.83
9-Aug	6838.03	6972.60	7349.20	7967.85	8142.11	8189.55	8270.11
10-Aug	6905.31	7142.99	7452.31	8082.82	8153.97	8229.83	8310.38
11-Aug	6838.03	6972.60	7349.20	7967.85	8142.11	8177.69	8270.11
12-Aug	6770.75	6905.31	7246.10	7864.74	8130.26	8177.69	8229.83
13-Aug	6703.47	6905.31	7246.10	7864.74	8118.40	8165.83	8229.83
14-Aug	6972.60	7246.10	7658.53	8094.68	8165.83	8270.11	8390.94
15-Aug	7246.10	7452.31	7864.74	8118.40	8229.83	8350.66	8471.50
16-Aug	6972.60	7142.99	7555.42	8094.68	8165.83	8270.11	8350.66
17-Aug	6972.60	7246.10	7658.53	8094.68	8165.83	8270.11	8390.94
18-Aug	6838.03	7039.88	7452.31	8070.96	8142.11	8189.55	8310.38
19-Aug	6838.03	7039.88	7452.31	8070.96	8142.11	8189.55	8310.38
20-Aug	9618.19	9755.90	9893.62	10036.28	10043.70	10153.18	10207.92
21-Aug	9677.86	9654.40	9607.47	9710.00	10031.33	10035.04	10038.75
22-Aug	9654.40	9630.94	9584.01	9801.81	10033.80	10037.52	10041.23
23-Aug	8350.66	8471.50	8592.33	9593.06	9769.45	9723.81	9701.00
24-Aug	8142.11	8165.83	8270.11	8511.77	9452.65	9663.26	9792.26
25-Aug	8153.97	8177.69	8310.38	8552.05	9522.85	9733.47	9780.85
26-Aug	10317.40	10241.58	10089.95	9912.87	9823.80	9773.56	9717.29
27-Aug	9849.25	9823.80	9754.80	9642.26	9391.51	9275.52	9195.57

Table A13, continued. Summer 1999 allocation scenario time series results for the pool – run guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	10317.40	10241.58	10089.95	9912.87	9823.80	9773.56	9717.29
29-Aug	9664.09	9801.81	9985.43	10037.52	10071.07	10180.55	10235.29
30-Aug	9780.85	9746.63	9712.41	9630.94	9618.19	9801.81	9893.62
31-Aug	8592.33	9205.02	9593.06	9769.45	9701.00	9654.40	9619.20
1-Sep	8431.22	8552.05	9205.02	9733.47	9746.63	9701.00	9666.13
2-Sep	8270.11	8390.94	8511.77	9452.65	9792.26	9746.63	9723.81
3-Sep	8165.83	8189.55	8350.66	8592.33	9593.06	9792.26	9769.45
4-Sep	8165.83	8189.55	8350.66	8592.33	9593.06	9792.26	9769.45
5-Sep	10031.33	10033.80	10038.75	10098.44	10290.03	10241.58	10127.86
6-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	1670.29	1655.20	1640.11	1604.90	1574.72	1554.60	1544.54
10-Sep	3892.77	3830.23	3746.83	3621.74	3496.65	3413.26	3350.71
11-Sep	6454.65	6386.53	6295.71	6159.49	6023.26	5932.44	5864.32
12-Sep	8253.77	8194.11	8074.78	7895.80	7686.99	7597.50	7508.01
13-Sep	8860.00	8833.08	8797.20	8743.38	8689.55	8653.67	8626.75
14-Sep	9174.93	9113.00	9051.08	8976.62	8922.79	8886.91	8868.97
15-Sep	9314.18	9236.85	9154.29	9030.44	8967.65	8931.76	8913.82
16-Sep	2554.42	2525.27	2486.41	2428.12	2369.82	2330.96	2311.53
17-Sep	3809.38	3767.68	3684.29	3559.19	3413.26	3350.71	3288.16
18-Sep	6749.81	6704.40	6613.58	6477.35	6318.42	6250.31	6182.19
19-Sep	7895.80	7806.31	7686.99	7508.01	7329.02	7209.70	7120.21
20-Sep	8590.87	8522.24	8432.75	8223.94	8044.95	7925.63	7865.97
21-Sep	1854.89	1825.74	1796.59	1728.58	1670.29	1650.17	1640.11
22-Sep	1363.45	1348.36	1328.24	1298.06	1267.88	1247.76	1232.67
23-Sep	2662.71	2632.15	2593.28	2534.99	2466.98	2437.83	2408.68
24-Sep	5160.48	5092.36	5001.54	4809.40	4643.32	4559.92	4497.38
25-Sep	6704.40	6658.99	6568.17	6431.94	6273.01	6182.19	6136.78
26-Sep	7925.63	7836.14	7716.82	7537.84	7358.85	7239.53	7150.04
27-Sep	8653.67	8635.73	8599.84	8462.58	8253.77	8164.27	8074.78
28-Sep	7955.46	7865.97	7746.65	7567.67	7388.68	7269.36	7179.87
29-Sep	8283.60	8223.94	8104.61	7925.63	7716.82	7627.33	7537.84
30-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table A14. Summer 1999 allocation scenario time series results for the pool – cover guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	13865.13	13454.55	12907.11	12265.14	11671.24	10180.55	11138.48
2-Jun	14248.87	13865.13	13454.55	12568.21	11962.07	10098.44	11404.86
3-Jun	14908.99	14688.95	14248.87	13454.55	12568.21	10037.52	11962.07
4-Jun	15921.06	15511.86	15019.01	14358.89	13591.41	9939.52	12669.23
5-Jun	16330.27	15921.06	15511.86	14688.95	14001.99	9801.81	13180.83
6-Jun	16603.08	16193.87	15784.66	14908.99	14248.87	9710.00	13454.55
7-Jun	16779.06	16603.08	16057.47	15129.03	14468.91	9618.19	13728.27
8-Jun	17131.01	16955.04	16603.08	15784.66	14908.99	9619.20	14248.87
9-Jun	18695.70	17901.84	16955.04	16330.27	15511.86	9666.13	14688.95
10-Jun	18523.44	18652.63	17901.84	16779.06	16057.47	9712.41	15239.05
11-Jun	18351.18	18437.31	18609.57	17131.01	16603.08	9758.04	15784.66
12-Jun	18394.25	18523.44	18652.63	17043.02	16466.68	9746.63	15648.26
13-Jun	18523.44	18652.63	17901.84	16779.06	16057.47	9712.41	15239.05
14-Jun	18523.44	18652.63	17901.84	16779.06	16057.47	9712.41	15239.05
15-Jun	18394.25	18523.44	18652.63	17043.02	16466.68	9746.63	15648.26
16-Jun	18307.22	18351.18	18523.44	18320.30	16779.06	9780.85	16057.47
17-Jun	18437.31	18566.50	18695.70	16955.04	16330.27	9735.22	15511.86
18-Jun	18738.76	17483.38	16867.05	16193.87	15375.45	9654.40	14578.93
19-Jun	18566.50	18695.70	17483.38	16691.07	15921.06	9701.00	15019.01
20-Jun	18394.25	18523.44	18652.63	17043.02	16466.68	9746.63	15648.26
21-Jun	18437.31	18566.50	18695.70	16955.04	16330.27	9735.22	15511.86
22-Jun	18480.38	18609.57	18738.76	16867.05	16193.87	9723.81	15375.45
23-Jun	18306.31	18308.12	18480.38	18738.76	16867.05	9792.26	16193.87
24-Jun	18300.90	18303.61	18307.22	18523.44	18320.30	9452.65	16779.06
25-Jun	18300.00	18302.71	18306.31	18480.38	18738.76	9382.44	16867.05
26-Jun	18266.11	18300.90	18304.51	18394.25	18652.63	9000.79	17043.02
27-Jun	18233.13	18300.00	18303.61	18351.18	18609.57	8796.56	17131.01
28-Jun	18233.13	18300.00	18303.61	18351.18	18609.57	8796.56	17131.01
29-Jun	18167.15	18266.11	18300.90	18307.22	18523.44	8552.05	18320.30
30-Jun	18167.15	18266.11	18300.90	18307.22	18523.44	8552.05	18320.30
1-Jul	18167.15	18266.11	18300.90	18307.22	18523.44	8552.05	18320.30
2-Jul	18200.14	18299.10	18302.71	18308.12	18566.50	8592.33	17483.38
3-Jul	18305.41	18307.22	18437.31	18695.70	16955.04	9733.47	16330.27
4-Jul	18300.00	18302.71	18306.31	18480.38	18738.76	9382.44	16867.05
5-Jul	18200.14	18299.10	18302.71	18308.12	18566.50	8592.33	17483.38
6-Jul	18101.18	18200.14	18299.10	18305.41	18437.31	8471.50	18695.70
7-Jul	18002.22	18101.18	18233.13	18302.71	18308.12	8350.66	18609.57
8-Jul	18002.22	18101.18	18233.13	18302.71	18308.12	8350.66	18609.57
9-Jul	18035.21	18134.16	18266.11	18303.61	18351.18	8390.94	18652.63
10-Jul	17969.23	18068.19	18200.14	18301.80	18307.22	8310.38	18566.50
11-Jul	17969.23	18035.21	18167.15	18301.80	18307.22	8310.38	18523.44
12-Jul	17760.01	18035.21	18167.15	18300.90	18306.31	8270.11	18523.44
13-Jul	18035.21	18101.18	18233.13	18302.71	18351.18	8350.66	18609.57
14-Jul	18035.21	18134.16	18233.13	18303.61	18351.18	8390.94	18609.57

Table A14, continued. Summer 1999 allocation scenario time series results for the pool – cover guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Microhabitat Index						
	Site Q	+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	18002.22	18068.19	18200.14	18301.80	18308.12	8350.66	18566.50
16-Jul	18035.21	18101.18	18233.13	18302.71	18351.18	8350.66	18609.57
17-Jul	18002.22	18068.19	18200.14	18301.80	18308.12	8310.38	18566.50
18-Jul	17969.23	18068.19	18200.14	18301.80	18307.22	8310.38	18566.50
19-Jul	17760.01	18035.21	18134.16	18300.90	18306.31	8270.11	18480.38
20-Jul	17550.79	18002.22	18134.16	18300.00	18305.41	8229.83	18480.38
21-Jul	18266.11	18300.90	18304.51	18394.25	18652.63	9000.79	17043.02
22-Jul	18167.15	18266.11	18300.90	18307.22	18523.44	8552.05	18320.30
23-Jul	18035.21	18134.16	18266.11	18303.61	18351.18	8390.94	18652.63
24-Jul	17760.01	18035.21	18134.16	18300.90	18306.31	8270.11	18480.38
25-Jul	17760.01	18035.21	18167.15	18300.90	18306.31	8270.11	18523.44
26-Jul	17760.01	18035.21	18134.16	18300.90	18306.31	8270.11	18480.38
27-Jul	17760.01	18002.22	18134.16	18300.00	18306.31	8270.11	18480.38
28-Jul	18068.19	18167.15	18266.11	18304.51	18394.25	8431.22	18652.63
29-Jul	18068.19	18167.15	18299.10	18304.51	18394.25	8431.22	18695.70
30-Jul	18035.21	18101.18	18233.13	18302.71	18351.18	8350.66	18609.57
31-Jul	18002.22	18101.18	18200.14	18302.71	18308.12	8350.66	18566.50
1-Aug	18068.19	18167.15	18299.10	18304.51	18394.25	8431.22	18695.70
2-Aug	18068.19	18167.15	18266.11	18304.51	18394.25	8431.22	18652.63
3-Aug	18002.22	18101.18	18200.14	18302.71	18308.12	8350.66	18566.50
4-Aug	17969.23	18035.21	18167.15	18300.90	18307.22	8310.38	18523.44
5-Aug	17760.01	18002.22	18134.16	18300.00	18306.31	8270.11	18480.38
6-Aug	17550.79	17969.23	18101.18	18299.10	18305.41	8229.83	18437.31
7-Aug	17341.57	17760.01	18068.19	18266.11	18304.51	8189.55	18394.25
8-Aug	17132.35	17760.01	18035.21	18266.11	18303.61	8177.69	18351.18
9-Aug	17341.57	17760.01	18068.19	18266.11	18304.51	8189.55	18394.25
10-Aug	17550.79	18002.22	18101.18	18300.00	18305.41	8229.83	18437.31
11-Aug	17341.57	17760.01	18068.19	18266.11	18304.51	8177.69	18394.25
12-Aug	17132.35	17550.79	18035.21	18233.13	18303.61	8177.69	18351.18
13-Aug	16923.13	17550.79	18035.21	18233.13	18302.71	8165.83	18351.18
14-Aug	17760.01	18035.21	18167.15	18300.90	18306.31	8270.11	18523.44
15-Aug	18035.21	18101.18	18233.13	18302.71	18351.18	8350.66	18609.57
16-Aug	17760.01	18002.22	18134.16	18300.90	18306.31	8270.11	18480.38
17-Aug	17760.01	18035.21	18167.15	18300.90	18306.31	8270.11	18523.44
18-Aug	17341.57	17969.23	18101.18	18299.10	18304.51	8189.55	18437.31
19-Aug	17341.57	17969.23	18101.18	18299.10	18304.51	8189.55	18437.31
20-Aug	14001.99	13591.41	13180.83	12366.16	11760.03	10153.18	11227.27
21-Aug	15129.03	14908.99	14468.91	13728.27	12770.25	10035.04	12164.12
22-Aug	14908.99	14688.95	14248.87	13454.55	12568.21	10037.52	11962.07
23-Aug	18480.38	18609.57	18738.76	16867.05	16193.87	9723.81	15375.45
24-Aug	18304.51	18306.31	18394.25	18652.63	17043.02	9663.26	16466.68
25-Aug	18305.41	18307.22	18437.31	18695.70	16955.04	9733.47	16330.27
26-Aug	10872.10	10863.42	10846.05	10692.12	10214.16	9773.56	9515.37
27-Aug	10350.72	10214.16	9767.57	9010.95	8567.53	9275.52	8303.38

Table A14, continued. Summer 1999 allocation scenario time series results for the pool – cover guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	10872.10	10863.42	10846.05	10692.12	10214.16	9773.56	9515.37
29-Aug	13865.13	13454.55	12907.11	12265.14	11671.24	10180.55	11138.48
30-Aug	16330.27	15921.06	15511.86	14688.95	14001.99	9801.81	13180.83
31-Aug	18738.76	17483.38	16867.05	16193.87	15375.45	9654.40	14578.93
1-Sep	18566.50	18695.70	17483.38	16691.07	15921.06	9701.00	15019.01
2-Sep	18394.25	18523.44	18652.63	17043.02	16466.68	9746.63	15648.26
3-Sep	18306.31	18308.12	18480.38	18738.76	16867.05	9792.26	16193.87
4-Sep	18306.31	18308.12	18480.38	18738.76	16867.05	9792.26	16193.87
5-Sep	12770.25	12568.21	12164.12	11582.44	10960.89	10241.58	10850.39
6-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	746.00	743.99	741.99	737.31	733.29	1554.60	729.28
10-Sep	1697.57	1665.33	1622.34	1557.86	1493.37	3413.26	1418.14
11-Sep	3482.96	3423.25	3343.65	3224.24	3104.84	5932.44	2965.53
12-Sep	4934.55	4888.69	4796.96	4659.37	4498.84	7597.50	4361.24
13-Sep	6988.64	6814.27	6581.78	6233.04	5884.29	8653.67	5477.43
14-Sep	8277.08	8198.19	8119.29	7744.25	7395.51	8886.91	7046.77
15-Sep	8461.75	8355.98	8250.78	8092.99	7686.13	8931.76	7337.38
16-Sep	1025.12	1015.92	1003.65	985.25	966.85	2330.96	948.44
17-Sep	1654.58	1633.09	1590.10	1525.62	1450.38	3350.71	1385.90
18-Sep	3741.67	3701.87	3622.27	3502.86	3363.55	6250.31	3244.14
19-Sep	4659.37	4590.57	4498.84	4361.24	4223.65	7209.70	4063.12
20-Sep	5244.93	5140.95	5072.15	4911.62	4774.03	7925.63	4636.43
21-Sep	804.28	795.08	785.87	764.40	746.00	1650.17	741.99
22-Sep	705.21	703.20	700.53	696.52	692.50	1247.76	687.82
23-Sep	1063.48	1049.66	1037.39	1018.99	997.52	2437.83	979.11
24-Sep	2348.59	2288.89	2209.28	2136.31	2084.48	4559.92	2009.25
25-Sep	3701.87	3662.07	3582.46	3463.06	3323.75	6182.19	3204.34
26-Sep	4682.30	4613.50	4521.77	4384.18	4246.58	7239.53	4086.06
27-Sep	5651.80	5535.55	5303.06	5095.08	4934.55	8164.27	4796.96
28-Sep	4705.23	4636.43	4544.70	4407.11	4269.51	7269.36	4108.99
29-Sep	4957.49	4911.62	4819.89	4682.30	4521.77	7627.33	4384.18
30-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table A15. Summer 1999 allocation scenario time series results for the algae – midge guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	8537.23	8517.37	8490.89	8330.52	8124.05	7913.22	7807.80
2-Jun	8629.58	8537.23	8517.37	8422.77	8238.26	8071.34	7965.92
3-Jun	9104.26	8946.04	8629.58	8517.37	8422.77	8330.52	8238.26
4-Jun	10219.84	9692.90	9183.37	8708.70	8523.99	8497.51	8453.52
5-Jun	10746.78	10219.84	9692.90	8946.04	8543.85	8517.37	8504.13
6-Jun	11098.08	10571.14	10044.19	9104.26	8629.58	8530.61	8517.37
7-Jun	11066.83	11098.08	10395.49	9262.49	8787.81	8543.85	8530.61
8-Jun	11004.34	11035.59	11098.08	10044.19	9104.26	8866.92	8629.58
9-Jun	14254.25	12439.38	11035.59	10746.78	9692.90	9183.37	8946.04
10-Jun	15121.92	14471.17	12439.38	11066.83	10395.49	9692.90	9341.60
11-Jun	15989.59	15555.76	14688.08	11004.34	11098.08	10395.49	10044.19
12-Jun	15772.67	15121.92	14471.17	11019.97	10922.43	10219.84	9868.54
13-Jun	15121.92	14471.17	12439.38	11066.83	10395.49	9692.90	9341.60
14-Jun	15121.92	14471.17	12439.38	11066.83	10395.49	9692.90	9341.60
15-Jun	15772.67	15121.92	14471.17	11019.97	10922.43	10219.84	9868.54
16-Jun	16271.23	15989.59	15121.92	13238.35	11066.83	10746.78	10395.49
17-Jun	15555.76	14905.00	14254.25	11035.59	10746.78	10044.19	9692.90
18-Jun	14037.33	11640.40	11051.21	10571.14	9517.25	9104.26	8866.92
19-Jun	14905.00	14254.25	11640.40	11082.46	10219.84	9517.25	9183.37
20-Jun	15772.67	15121.92	14471.17	11019.97	10922.43	10219.84	9868.54
21-Jun	15555.76	14905.00	14254.25	11035.59	10746.78	10044.19	9692.90
22-Jun	15338.84	14688.08	14037.33	11051.21	10571.14	9868.54	9517.25
23-Jun	16335.94	16206.51	15338.84	14037.33	11051.21	10922.43	10571.14
24-Jun	16724.24	16530.09	16271.23	15121.92	13238.35	11019.97	11066.83
25-Jun	16788.95	16594.81	16335.94	15338.84	14037.33	11004.34	11051.21
26-Jun	16938.65	16724.24	16465.37	15772.67	14471.17	12439.38	11019.97
27-Jun	17023.62	16788.95	16530.09	15989.59	14688.08	13238.35	11004.34
28-Jun	17023.62	16788.95	16530.09	15989.59	14688.08	13238.35	11004.34
29-Jun	17193.58	16938.65	16724.24	16271.23	15121.92	14254.25	13238.35
30-Jun	17193.58	16938.65	16724.24	16271.23	15121.92	14254.25	13238.35
1-Jul	17193.58	16938.65	16724.24	16271.23	15121.92	14254.25	13238.35
2-Jul	17108.60	16853.67	16594.81	16206.51	14905.00	14037.33	11640.40
3-Jul	16400.66	16271.23	15555.76	14254.25	11035.59	11082.46	10746.78
4-Jul	16788.95	16594.81	16335.94	15338.84	14037.33	11004.34	11051.21
5-Jul	17108.60	16853.67	16594.81	16206.51	14905.00	14037.33	11640.40
6-Jul	17363.53	17108.60	16853.67	16400.66	15555.76	14688.08	14254.25
7-Jul	17618.46	17363.53	17023.62	16594.81	16206.51	15338.84	14688.08
8-Jul	17618.46	17363.53	17023.62	16594.81	16206.51	15338.84	14688.08
9-Jul	17533.49	17278.55	16938.65	16530.09	15989.59	15121.92	14471.17
10-Jul	17703.44	17448.51	17108.60	16659.52	16271.23	15555.76	14905.00
11-Jul	17703.44	17533.49	17193.58	16659.52	16271.23	15555.76	15121.92
12-Jul	17838.42	17533.49	17193.58	16724.24	16335.94	15772.67	15121.92
13-Jul	17533.49	17363.53	17023.62	16594.81	15989.59	15338.84	14688.08
14-Jul	17533.49	17278.55	17023.62	16530.09	15989.59	15121.92	14688.08

Table A15, continued. Summer 1999 allocation scenario time series results for the algae – midge guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	17618.46	17448.51	17108.60	16659.52	16206.51	15338.84	14905.00
16-Jul	17533.49	17363.53	17023.62	16594.81	15989.59	15338.84	14688.08
17-Jul	17618.46	17448.51	17108.60	16659.52	16206.51	15555.76	14905.00
18-Jul	17703.44	17448.51	17108.60	16659.52	16271.23	15555.76	14905.00
19-Jul	17838.42	17533.49	17278.55	16724.24	16335.94	15772.67	15338.84
20-Jul	17973.39	17618.46	17278.55	16788.95	16400.66	15989.59	15338.84
21-Jul	16938.65	16724.24	16465.37	15772.67	14471.17	12439.38	11019.97
22-Jul	17193.58	16938.65	16724.24	16271.23	15121.92	14254.25	13238.35
23-Jul	17533.49	17278.55	16938.65	16530.09	15989.59	15121.92	14471.17
24-Jul	17838.42	17533.49	17278.55	16724.24	16335.94	15772.67	15338.84
25-Jul	17838.42	17533.49	17193.58	16724.24	16335.94	15772.67	15121.92
26-Jul	17838.42	17533.49	17278.55	16724.24	16335.94	15772.67	15338.84
27-Jul	17838.42	17618.46	17278.55	16788.95	16335.94	15772.67	15338.84
28-Jul	17448.51	17193.58	16938.65	16465.37	15772.67	14905.00	14471.17
29-Jul	17448.51	17193.58	16853.67	16465.37	15772.67	14905.00	14254.25
30-Jul	17533.49	17363.53	17023.62	16594.81	15989.59	15338.84	14688.08
31-Jul	17618.46	17363.53	17108.60	16594.81	16206.51	15338.84	14905.00
1-Aug	17448.51	17193.58	16853.67	16465.37	15772.67	14905.00	14254.25
2-Aug	17448.51	17193.58	16938.65	16465.37	15772.67	14905.00	14471.17
3-Aug	17618.46	17363.53	17108.60	16594.81	16206.51	15338.84	14905.00
4-Aug	17703.44	17533.49	17193.58	16724.24	16271.23	15555.76	15121.92
5-Aug	17838.42	17618.46	17278.55	16788.95	16335.94	15772.67	15338.84
6-Aug	17973.39	17703.44	17363.53	16853.67	16400.66	15989.59	15555.76
7-Aug	18108.37	17838.42	17448.51	16938.65	16465.37	16206.51	15772.67
8-Aug	18243.35	17838.42	17533.49	16938.65	16530.09	16271.23	15989.59
9-Aug	18108.37	17838.42	17448.51	16938.65	16465.37	16206.51	15772.67
10-Aug	17973.39	17618.46	17363.53	16788.95	16400.66	15989.59	15555.76
11-Aug	18108.37	17838.42	17448.51	16938.65	16465.37	16271.23	15772.67
12-Aug	18243.35	17973.39	17533.49	17023.62	16530.09	16271.23	15989.59
13-Aug	18378.32	17973.39	17533.49	17023.62	16594.81	16335.94	15989.59
14-Aug	17838.42	17533.49	17193.58	16724.24	16335.94	15772.67	15121.92
15-Aug	17533.49	17363.53	17023.62	16594.81	15989.59	15338.84	14688.08
16-Aug	17838.42	17618.46	17278.55	16724.24	16335.94	15772.67	15338.84
17-Aug	17838.42	17533.49	17193.58	16724.24	16335.94	15772.67	15121.92
18-Aug	18108.37	17703.44	17363.53	16853.67	16465.37	16206.51	15555.76
19-Aug	18108.37	17703.44	17363.53	16853.67	16465.37	16206.51	15555.76
20-Aug	8543.85	8523.99	8504.13	8361.27	8176.76	7965.92	7860.51
21-Aug	9262.49	9104.26	8787.81	8530.61	8484.27	8392.02	8299.76
22-Aug	9104.26	8946.04	8629.58	8517.37	8422.77	8330.52	8238.26
23-Aug	15338.84	14688.08	14037.33	11051.21	10571.14	9868.54	9517.25
24-Aug	16465.37	16335.94	15772.67	14471.17	11019.97	11066.83	10922.43
25-Aug	16400.66	16271.23	15555.76	14254.25	11035.59	11082.46	10746.78
26-Aug	7649.67	7593.09	7479.94	7412.69	7573.32	7427.62	7174.65
27-Aug	7527.43	7573.32	7343.30	6837.35	4974.33	4084.98	3574.73

Table A15, continued. Summer 1999 allocation scenario time series results for the algae – midge guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	7649.67	7593.09	7479.94	7412.69	7573.32	7427.62	7174.65
29-Aug	8537.23	8517.37	8490.89	8330.52	8124.05	7913.22	7807.80
30-Aug	10746.78	10219.84	9692.90	8946.04	8543.85	8517.37	8504.13
31-Aug	14037.33	11640.40	11051.21	10571.14	9517.25	9104.26	8866.92
1-Sep	14905.00	14254.25	11640.40	11082.46	10219.84	9517.25	9183.37
2-Sep	15772.67	15121.92	14471.17	11019.97	10922.43	10219.84	9868.54
3-Sep	16335.94	16206.51	15338.84	14037.33	11051.21	10922.43	10571.14
4-Sep	16335.94	16206.51	15338.84	14037.33	11051.21	10922.43	10571.14
5-Sep	8484.27	8422.77	8299.76	8071.34	7702.38	7593.09	7508.23
6-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	2621.70	2604.60	2587.50	2547.61	2513.41	2490.62	2479.22
10-Sep	4347.87	4299.37	4234.70	4137.70	4040.70	3976.03	3927.53
11-Sep	3919.16	3967.35	4031.60	4127.98	4224.36	4288.62	4336.81
12-Sep	3056.09	3077.28	3119.67	3183.26	3257.44	3289.23	3321.02
13-Sep	2803.13	2816.33	2833.93	2860.32	2886.72	2904.32	2917.52
14-Sep	3467.83	3147.13	2826.43	2745.93	2772.33	2789.93	2798.73
15-Sep	4381.43	3788.53	3360.93	2719.53	2750.33	2767.93	2776.73
16-Sep	3309.82	3287.13	3256.88	3211.51	3166.14	3135.90	3120.77
17-Sep	4283.20	4250.87	4186.20	4089.20	3976.03	3927.53	3879.04
18-Sep	3710.33	3742.46	3806.71	3903.09	4015.54	4063.73	4111.92
19-Sep	3183.26	3215.05	3257.44	3321.02	3384.60	3426.99	3458.78
20-Sep	2935.12	2960.71	2992.51	3066.69	3130.27	3172.66	3193.85
21-Sep	2765.37	2742.69	2720.00	2667.07	2621.70	2598.90	2587.50
22-Sep	2274.04	2256.95	2234.15	2199.95	2165.76	2142.96	2125.86
23-Sep	3394.04	3370.31	3340.06	3294.69	3241.76	3219.07	3196.39
24-Sep	4834.78	4882.97	4947.22	4994.88	4929.86	4865.20	4816.70
25-Sep	3742.46	3774.59	3838.84	3935.22	4047.67	4111.92	4144.05
26-Sep	3172.66	3204.45	3246.84	3310.42	3374.01	3416.39	3448.19
27-Sep	2904.32	2913.12	2930.72	2981.91	3056.09	3087.88	3119.67
28-Sep	3162.06	3193.85	3236.24	3299.83	3363.41	3405.80	3437.59
29-Sep	3045.49	3066.69	3109.08	3172.66	3246.84	3278.63	3310.42
30-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table A16. Summer 2002 allocation scenario time series results for the riffle guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	3289.39	3251.22	3174.89	3041.30	2926.80	2850.47	2812.30
2-Jun	4443.56	4354.43	4235.58	4057.31	3879.03	3760.19	3671.05
3-Jun	5651.72	5545.63	5404.18	5192.01	5008.09	4889.24	4800.11
4-Jun	5934.61	5863.89	5722.44	5474.91	5262.74	5126.94	5067.51
5-Jun	6005.34	5934.61	5793.17	5580.99	5333.46	5192.01	5126.94
6-Jun	4740.68	4681.26	4562.41	4354.43	4176.15	4057.31	3997.88
7-Jun	5368.82	5298.10	5156.65	4978.38	4770.39	4651.55	4592.12
8-Jun	6465.04	6358.96	6252.87	6005.34	5793.17	5651.72	5580.99
9-Jun	7440.13	7325.60	7096.54	6783.30	6571.13	6429.68	6358.96
10-Jun	7469.09	7446.19	7423.29	7475.16	7325.60	7096.54	6982.01
11-Jun	7762.04	7674.57	7557.94	7469.09	7423.29	7452.93	7475.16
12-Jun	8036.53	7982.01	7872.98	7703.73	7499.62	7469.09	7453.82
13-Jun	7845.72	7762.04	7674.57	7491.99	7446.19	7430.70	7445.52
14-Jun	3499.30	3442.05	3365.72	3251.22	3136.72	3060.39	3003.14
15-Jun	5298.10	5227.37	5097.23	4889.24	4710.97	4592.12	4532.70
16-Jun	6818.66	6747.94	6606.49	6394.32	6146.79	6040.70	5934.61
17-Jun	7430.92	7438.11	7467.75	7382.86	7039.28	6854.03	6747.94
18-Jun	7732.88	7645.41	7528.78	7461.46	7430.70	7460.34	7482.57
19-Jun	6889.39	6783.30	6641.85	6429.68	6217.51	6076.06	5969.98
20-Jun	7482.57	7497.39	7268.33	6924.75	6677.22	6535.77	6465.04
21-Jun	7557.94	7499.62	7469.09	7423.29	7475.16	7497.39	7325.60
22-Jun	7982.01	7927.50	7818.46	7616.25	7484.35	7453.82	7438.56
23-Jun	8507.42	8384.53	8277.62	8036.53	7872.98	7762.04	7703.73
24-Jun	8812.79	8725.54	8551.04	8313.26	8063.79	7982.01	7900.24
25-Jun	8800.88	8819.39	8837.90	8681.91	8420.17	8277.62	8206.34
26-Jun	8794.68	8794.69	8800.88	8837.90	8681.91	8507.42	8420.17
27-Jun	8825.56	8844.07	8769.16	8507.42	8277.62	8135.07	8036.53
28-Jun	5863.89	5757.80	5651.72	5404.18	5192.01	5067.51	5008.09
29-Jun	7452.93	7467.75	7497.39	7153.81	6854.03	6712.58	6606.49
30-Jun	8063.79	8009.27	7900.24	7732.88	7528.78	7484.35	7461.46
1-Jul	8681.91	8594.67	8420.17	8206.34	7982.01	7872.98	7818.46
2-Jul	8800.88	8819.39	8837.90	8681.91	8420.17	8277.62	8206.34
3-Jul	8794.67	8794.69	8794.71	8831.73	8725.54	8551.04	8463.79
4-Jul	8886.59	8817.64	8794.67	8794.70	8825.56	8850.24	8769.16
5-Jul	9024.49	8955.54	8886.59	8794.67	8794.70	8813.22	8825.56
6-Jul	8530.59	8689.83	8912.94	8932.56	8794.66	8794.67	8794.69
7-Jul	8298.37	8448.33	8745.60	9001.51	8863.60	8794.66	8794.67
8-Jul	8332.22	8530.59	8801.38	8978.52	8840.62	8794.66	8794.68
9-Jul	8230.69	8332.22	8612.86	8968.71	8909.57	8817.64	8794.66
10-Jul	8196.85	8298.37	8530.59	8912.94	8932.56	8840.62	8794.65
11-Jul	8163.00	8264.53	8366.06	8857.16	8955.54	8863.60	8817.64
12-Jul	8095.32	8196.85	8298.37	8745.60	9001.51	8909.57	8863.60
13-Jul	8027.63	8095.32	8230.69	8612.86	8968.71	8955.54	8909.57
14-Jul	8912.94	9024.49	8932.56	8794.66	8794.69	8800.88	8813.22

Table A16, continued. Summer 2002 allocation scenario time series results for the riffle guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	8794.69	8794.70	8813.22	8856.41	8594.67	8420.17	8348.89
16-Jul	8909.57	8840.62	8794.66	8794.70	8819.39	8844.07	8812.79
17-Jul	8745.60	8857.16	9001.51	8863.60	8794.67	8794.69	8794.71
18-Jul	8298.37	8448.33	8745.60	9001.51	8863.60	8794.66	8794.67
19-Jul	8230.69	8332.22	8612.86	8968.71	8909.57	8817.64	8794.66
20-Jul	8196.85	8298.37	8530.59	8912.94	8932.56	8840.62	8794.65
21-Jul	8230.69	8332.22	8612.86	8968.71	8909.57	8817.64	8794.66
22-Jul	8095.32	8196.85	8298.37	8745.60	9001.51	8909.57	8863.60
23-Jul	8196.85	8298.37	8530.59	8912.94	8932.56	8840.62	8794.65
24-Jul	8129.16	8230.69	8332.22	8801.38	8978.52	8886.59	8840.62
25-Jul	8912.94	9024.49	8932.56	8794.66	8794.69	8800.88	8813.22
26-Jul	8794.67	8794.69	8794.71	8831.73	8725.54	8551.04	8463.79
27-Jul	8831.73	8850.24	8725.54	8463.79	8241.98	8099.43	8009.27
28-Jul	8420.17	8313.26	8206.34	7982.01	7818.46	7703.73	7645.41
29-Jul	8794.70	8807.05	8825.56	8769.16	8507.42	8348.89	8277.62
30-Jul	8978.52	8909.57	8840.62	8794.68	8800.88	8825.56	8837.90
31-Jul	8530.59	8689.83	8912.94	8932.56	8794.66	8794.67	8794.69
1-Aug	8163.00	8264.53	8366.06	8857.16	8955.54	8863.60	8817.64
2-Aug	7837.16	7964.14	8129.16	8332.22	8801.38	8968.71	8978.52
3-Aug	8027.63	8095.32	8230.69	8612.86	8968.71	8955.54	8909.57
4-Aug	8298.37	8448.33	8745.60	9001.51	8863.60	8794.66	8794.67
5-Aug	8801.38	8912.94	8978.52	8840.62	8794.68	8794.70	8800.88
6-Aug	8612.86	8745.60	8968.71	8909.57	8794.66	8794.68	8794.70
7-Aug	7837.16	7964.14	8129.16	8332.22	8801.38	8968.71	8978.52
8-Aug	7519.71	7710.18	7964.14	8196.85	8448.33	8745.60	8912.94
9-Aug	7306.94	7456.22	7710.18	8061.47	8264.53	8448.33	8689.83
10-Aug	7264.05	7392.73	7646.69	8027.63	8230.69	8366.06	8612.86
11-Aug	7264.05	7392.73	7646.69	8027.63	8230.69	8366.06	8612.86
12-Aug	7221.15	7349.84	7519.71	7964.14	8196.85	8332.22	8448.33
13-Aug	7392.73	7583.20	7837.16	8129.16	8332.22	8612.86	8801.38
14-Aug	7135.37	7221.15	7392.73	7773.67	8129.16	8264.53	8332.22
15-Aug	7049.58	7135.37	7306.94	7646.69	8061.47	8163.00	8264.53
16-Aug	7049.58	7178.26	7349.84	7710.18	8061.47	8196.85	8298.37
17-Aug	7135.37	7264.05	7392.73	7837.16	8129.16	8264.53	8332.22
18-Aug	7092.47	7221.15	7392.73	7773.67	8095.32	8230.69	8298.37
19-Aug	7264.05	7392.73	7646.69	8027.63	8230.69	8366.06	8612.86
20-Aug	7392.73	7583.20	7837.16	8129.16	8332.22	8612.86	8801.38
21-Aug	7135.37	7221.15	7392.73	7773.67	8129.16	8230.69	8332.22
22-Aug	7049.58	7135.37	7306.94	7646.69	8061.47	8196.85	8264.53
23-Aug	6963.79	7092.47	7221.15	7583.20	7964.14	8129.16	8196.85
24-Aug	6926.07	7049.58	7178.26	7519.71	7900.65	8095.32	8163.00
25-Aug	6963.79	7092.47	7264.05	7583.20	7964.14	8129.16	8230.69
26-Aug	6963.79	7092.47	7264.05	7583.20	7964.14	8129.16	8230.69
27-Aug	7092.47	7178.26	7349.84	7773.67	8095.32	8230.69	8298.37

Table A16, continued. Summer 2002 allocation scenario time series results for the riffle guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	7092.47	7178.26	7349.84	7773.67	8095.32	8230.69	8298.37
29-Aug	7135.37	7264.05	7392.73	7837.16	8129.16	8264.53	8332.22
30-Aug	7264.05	7392.73	7646.69	8027.63	8230.69	8366.06	8612.86
31-Aug	7264.05	7392.73	7646.69	8027.63	8230.69	8366.06	8612.86
1-Sep	7349.84	7519.71	7773.67	8095.32	8298.37	8530.59	8745.60
2-Sep	7306.94	7456.22	7710.18	8061.47	8264.53	8448.33	8689.83
3-Sep	7264.05	7392.73	7646.69	8027.63	8230.69	8366.06	8612.86
4-Sep	7264.05	7392.73	7646.69	8027.63	8230.69	8366.06	8612.86
5-Sep	7178.26	7306.94	7456.22	7900.65	8163.00	8298.37	8366.06
6-Sep	7006.68	7135.37	7306.94	7646.69	8027.63	8163.00	8264.53
7-Sep	6963.79	7092.47	7221.15	7583.20	7964.14	8129.16	8196.85
8-Sep	6963.79	7092.47	7221.15	7583.20	7964.14	8129.16	8196.85
9-Sep	6963.79	7049.58	7221.15	7519.71	7964.14	8129.16	8196.85
10-Sep	6926.07	7006.68	7178.26	7456.22	7900.65	8061.47	8163.00
11-Sep	6888.36	7006.68	7135.37	7456.22	7837.16	8061.47	8129.16
12-Sep	6850.64	6963.79	7135.37	7392.73	7773.67	8027.63	8129.16
13-Sep	6812.92	6926.07	7092.47	7349.84	7710.18	7964.14	8095.32
14-Sep	6812.92	6888.36	7049.58	7306.94	7710.18	7964.14	8061.47
15-Sep	6888.36	6963.79	7135.37	7392.73	7837.16	8061.47	8129.16
16-Sep	7135.37	7264.05	7392.73	7837.16	8129.16	8264.53	8332.22
17-Sep	7519.71	7710.18	7964.14	8196.85	8448.33	8745.60	8912.94
18-Sep	7349.84	7519.71	7773.67	8095.32	8298.37	8530.59	8745.60
19-Sep	7092.47	7221.15	7392.73	7773.67	8095.32	8230.69	8332.22
20-Sep	7006.68	7135.37	7306.94	7646.69	8027.63	8163.00	8264.53
21-Sep	7456.22	7646.69	7900.65	8163.00	8366.06	8689.83	8857.16
22-Sep	8840.62	8794.66	8794.68	8800.88	8837.90	8812.79	8681.91
23-Sep	8463.79	8348.89	8241.98	8009.27	7845.72	7732.88	7674.57
24-Sep	8819.39	8837.90	8812.79	8551.04	8313.26	8170.70	8063.79
25-Sep	8366.06	8612.86	8857.16	8955.54	8817.64	8794.67	8794.69
26-Sep	8794.67	8794.69	8794.71	8831.73	8725.54	8551.04	8463.79
27-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28-Sep	1445.72	1412.85	1379.98	1303.30	1237.56	1193.74	1171.83
29-Sep	4562.41	4473.27	4354.43	4176.15	3997.88	3879.03	3789.90
30-Sep	6924.75	6818.66	6677.22	6465.04	6252.87	6111.42	6005.34

Table A17. Summer 2002 allocation scenario time series results for the fast generalist guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	3637.90	3571.35	3438.25	3205.32	3005.66	2872.56	2806.01
2-Jun	5175.51	5074.88	4940.71	4739.46	4538.21	4404.04	4303.41
3-Jun	6242.65	6186.48	6111.58	5999.24	5812.81	5678.64	5578.01
4-Jun	6392.43	6354.98	6280.09	6149.03	6036.69	5946.98	5879.89
5-Jun	6429.88	6392.43	6317.54	6205.20	6074.14	5999.24	5946.98
6-Jun	5510.93	5443.85	5309.68	5074.88	4873.63	4739.46	4672.38
7-Jun	6092.86	6055.41	5980.52	5779.27	5544.47	5410.30	5343.22
8-Jun	6673.28	6617.11	6560.94	6429.88	6317.54	6242.65	6205.20
9-Jun	6885.58	6892.49	6906.31	6841.79	6729.45	6654.56	6617.11
10-Jun	7123.52	7047.17	6970.81	6908.73	6892.49	6906.31	6913.22
11-Jun	7362.76	7316.95	7255.87	7123.52	6970.81	6935.33	6908.73
12-Jun	7570.37	7527.63	7442.14	7332.22	7225.33	7123.52	7072.62
13-Jun	7420.77	7362.76	7316.95	7199.88	7047.17	6961.94	6944.20
14-Jun	4003.93	3904.10	3771.00	3571.35	3371.69	3238.59	3138.77
15-Jun	6055.41	6017.97	5913.44	5678.64	5477.39	5343.22	5276.13
16-Jun	6860.51	6823.06	6748.17	6635.83	6504.77	6448.60	6392.43
17-Jun	6996.26	6953.07	6917.60	6889.03	6909.77	6879.23	6823.06
18-Jun	7347.49	7301.68	7240.60	7098.07	6961.94	6926.47	6899.86
19-Jun	6897.96	6841.79	6766.90	6654.56	6542.22	6467.32	6411.15
20-Jun	6899.86	6882.12	6895.94	6916.68	6785.62	6710.73	6673.28
21-Jun	7255.87	7225.33	7123.52	6970.81	6908.73	6882.12	6892.49
22-Jun	7527.63	7484.89	7399.40	7286.41	7174.43	7072.62	7021.71
23-Jun	7536.43	7522.32	7545.46	7570.37	7442.14	7362.76	7332.22
24-Jun	7612.78	7590.97	7547.33	7537.75	7591.74	7527.63	7463.51
25-Jun	7361.34	7448.79	7536.24	7580.06	7514.61	7545.46	7560.89
26-Jun	7508.83	7438.17	7361.34	7536.24	7580.06	7536.43	7514.61
27-Jun	7477.94	7565.39	7601.87	7536.43	7545.46	7576.31	7570.37
28-Jun	6354.98	6298.81	6242.65	6111.58	5999.24	5879.89	5812.81
29-Jun	6935.33	6917.60	6882.12	6902.86	6879.23	6804.34	6748.17
30-Jun	7591.74	7549.00	7463.51	7347.49	7240.60	7174.43	7098.07
1-Jul	7580.06	7558.24	7514.61	7560.89	7527.63	7442.14	7399.40
2-Jul	7361.34	7448.79	7536.24	7580.06	7514.61	7545.46	7560.89
3-Jul	7544.15	7473.50	7332.19	7507.09	7590.97	7547.33	7525.52
4-Jul	7836.66	7723.26	7579.48	7367.52	7477.94	7594.54	7601.87
5-Jul	8063.46	7950.06	7836.66	7579.48	7367.52	7419.64	7477.94
6-Jul	7049.08	7385.58	7837.50	7912.26	7650.13	7544.15	7438.17
7-Jul	6788.08	6874.69	7498.56	8025.66	7798.86	7650.13	7544.15
8-Jul	6744.19	7049.08	7611.54	7987.86	7761.06	7614.81	7508.83
9-Jul	6875.85	6744.19	7223.47	7950.48	7874.46	7723.26	7614.81
10-Jul	6919.74	6788.08	7049.08	7837.50	7912.26	7761.06	7685.46
11-Jul	6963.63	6831.96	6700.30	7724.52	7950.06	7798.86	7723.26
12-Jul	7051.40	6919.74	6788.08	7498.56	8025.66	7874.46	7798.86
13-Jul	7139.18	7051.40	6875.85	7223.47	7950.48	7950.06	7874.46
14-Jul	7837.50	8063.46	7912.26	7650.13	7438.17	7361.34	7419.64

Table A17, continued. Summer 2002 allocation scenario time series results for the fast generalist guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	7438.17	7367.52	7419.64	7623.69	7558.24	7514.61	7530.04
16-Jul	7874.46	7761.06	7614.81	7402.84	7448.79	7565.39	7612.78
17-Jul	7498.56	7724.52	8025.66	7798.86	7544.15	7438.17	7332.19
18-Jul	6788.08	6874.69	7498.56	8025.66	7798.86	7650.13	7544.15
19-Jul	6875.85	6744.19	7223.47	7950.48	7874.46	7723.26	7614.81
20-Jul	6919.74	6788.08	7049.08	7837.50	7912.26	7761.06	7685.46
21-Jul	6875.85	6744.19	7223.47	7950.48	7874.46	7723.26	7614.81
22-Jul	7051.40	6919.74	6788.08	7498.56	8025.66	7874.46	7798.86
23-Jul	6919.74	6788.08	7049.08	7837.50	7912.26	7761.06	7685.46
24-Jul	7007.52	6875.85	6744.19	7611.54	7987.86	7836.66	7761.06
25-Jul	7837.50	8063.46	7912.26	7650.13	7438.17	7361.34	7419.64
26-Jul	7544.15	7473.50	7332.19	7507.09	7590.97	7547.33	7525.52
27-Jul	7507.09	7594.54	7590.97	7525.52	7553.18	7584.03	7549.00
28-Jul	7514.61	7537.75	7560.89	7527.63	7399.40	7332.22	7301.68
29-Jul	7367.52	7390.49	7477.94	7601.87	7536.43	7530.04	7545.46
30-Jul	7987.86	7874.46	7761.06	7508.83	7361.34	7477.94	7536.24
31-Jul	7049.08	7385.58	7837.50	7912.26	7650.13	7544.15	7438.17
1-Aug	6963.63	6831.96	6700.30	7724.52	7950.06	7798.86	7723.26
2-Aug	7063.72	7114.03	7007.52	6744.19	7611.54	7950.48	7987.86
3-Aug	7139.18	7051.40	6875.85	7223.47	7950.48	7950.06	7874.46
4-Aug	6788.08	6874.69	7498.56	8025.66	7798.86	7650.13	7544.15
5-Aug	7611.54	7837.50	7987.86	7761.06	7508.83	7367.52	7361.34
6-Aug	7223.47	7498.56	7950.48	7874.46	7614.81	7508.83	7402.84
7-Aug	7063.72	7114.03	7007.52	6744.19	7611.54	7950.48	7987.86
8-Aug	6937.96	7013.42	7114.03	6919.74	6874.69	7498.56	7837.50
9-Aug	6651.61	6912.81	7013.42	7095.29	6831.96	6874.69	7385.58
10-Aug	6533.58	6887.66	6988.27	7139.18	6875.85	6700.30	7223.47
11-Aug	6533.58	6887.66	6988.27	7139.18	6875.85	6700.30	7223.47
12-Aug	6415.55	6769.63	6937.96	7114.03	6919.74	6744.19	6874.69
13-Aug	6887.66	6963.12	7063.72	7007.52	6744.19	7223.47	7611.54
14-Aug	6179.50	6415.55	6887.66	7038.57	7007.52	6831.96	6744.19
15-Aug	5943.44	6179.50	6651.61	6988.27	7095.29	6963.63	6831.96
16-Aug	5943.44	6297.53	6769.63	7013.42	7095.29	6919.74	6788.08
17-Aug	6179.50	6533.58	6887.66	7063.72	7007.52	6831.96	6744.19
18-Aug	6061.47	6415.55	6887.66	7038.57	7051.40	6875.85	6788.08
19-Aug	6533.58	6887.66	6988.27	7139.18	6875.85	6700.30	7223.47
20-Aug	6887.66	6963.12	7063.72	7007.52	6744.19	7223.47	7611.54
21-Aug	6179.50	6415.55	6887.66	7038.57	7007.52	6875.85	6744.19
22-Aug	5943.44	6179.50	6651.61	6988.27	7095.29	6919.74	6831.96
23-Aug	5707.39	6061.47	6415.55	6963.12	7114.03	7007.52	6919.74
24-Aug	5656.56	5943.44	6297.53	6937.96	7088.88	7051.40	6963.63
25-Aug	5707.39	6061.47	6533.58	6963.12	7114.03	7007.52	6875.85
26-Aug	5707.39	6061.47	6533.58	6963.12	7114.03	7007.52	6875.85
27-Aug	6061.47	6297.53	6769.63	7038.57	7051.40	6875.85	6788.08

Table A17, continued. Summer 2002 allocation scenario time series results for the fast generalist guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	6061.47	6297.53	6769.63	7038.57	7051.40	6875.85	6788.08
29-Aug	6179.50	6533.58	6887.66	7063.72	7007.52	6831.96	6744.19
30-Aug	6533.58	6887.66	6988.27	7139.18	6875.85	6700.30	7223.47
31-Aug	6533.58	6887.66	6988.27	7139.18	6875.85	6700.30	7223.47
1-Sep	6769.63	6937.96	7038.57	7051.40	6788.08	7049.08	7498.56
2-Sep	6651.61	6912.81	7013.42	7095.29	6831.96	6874.69	7385.58
3-Sep	6533.58	6887.66	6988.27	7139.18	6875.85	6700.30	7223.47
4-Sep	6533.58	6887.66	6988.27	7139.18	6875.85	6700.30	7223.47
5-Sep	6297.53	6651.61	6912.81	7088.88	6963.63	6788.08	6700.30
6-Sep	5825.42	6179.50	6651.61	6988.27	7139.18	6963.63	6831.96
7-Sep	5707.39	6061.47	6415.55	6963.12	7114.03	7007.52	6919.74
8-Sep	5707.39	6061.47	6415.55	6963.12	7114.03	7007.52	6919.74
9-Sep	5707.39	5943.44	6415.55	6937.96	7114.03	7007.52	6919.74
10-Sep	5656.56	5825.42	6297.53	6912.81	7088.88	7095.29	6963.63
11-Sep	5605.72	5825.42	6179.50	6912.81	7063.72	7095.29	7007.52
12-Sep	5554.89	5707.39	6179.50	6887.66	7038.57	7139.18	7007.52
13-Sep	5504.05	5656.56	6061.47	6769.63	7013.42	7114.03	7051.40
14-Sep	5504.05	5605.72	5943.44	6651.61	7013.42	7114.03	7095.29
15-Sep	5605.72	5707.39	6179.50	6887.66	7063.72	7095.29	7007.52
16-Sep	6179.50	6533.58	6887.66	7063.72	7007.52	6831.96	6744.19
17-Sep	6937.96	7013.42	7114.03	6919.74	6874.69	7498.56	7837.50
18-Sep	6769.63	6937.96	7038.57	7051.40	6788.08	7049.08	7498.56
19-Sep	6061.47	6415.55	6887.66	7038.57	7051.40	6875.85	6744.19
20-Sep	5825.42	6179.50	6651.61	6988.27	7139.18	6963.63	6831.96
21-Sep	6912.81	6988.27	7088.88	6963.63	6700.30	7385.58	7724.52
22-Sep	7761.06	7650.13	7508.83	7361.34	7536.24	7612.78	7580.06
23-Sep	7525.52	7530.04	7553.18	7549.00	7420.77	7347.49	7316.95
24-Sep	7448.79	7536.24	7612.78	7547.33	7537.75	7568.60	7591.74
25-Sep	6700.30	7223.47	7724.52	7950.06	7723.26	7579.48	7473.50
26-Sep	7544.15	7473.50	7332.19	7507.09	7590.97	7547.33	7525.52
27-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28-Sep	900.11	885.04	869.97	834.81	804.67	784.58	774.53
29-Sep	5309.68	5209.05	5074.88	4873.63	4672.38	4538.21	4437.58
30-Sep	6916.68	6860.51	6785.62	6673.28	6560.94	6486.05	6429.88

Table A18. Summer 2002 allocation scenario time series results for the pool - run guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	6636.29	6590.88	6500.06	6341.12	6204.90	6114.08	6068.67
2-Jun	7865.97	7776.48	7657.16	7478.18	7299.19	7179.87	7090.38
3-Jun	8707.49	8680.58	8644.70	8590.87	8432.75	8313.43	8223.94
4-Jun	8779.26	8761.32	8725.43	8662.64	8608.81	8552.07	8492.41
5-Jun	8797.20	8779.26	8743.38	8689.55	8626.75	8590.87	8552.07
6-Jun	8164.27	8104.61	7985.29	7776.48	7597.50	7478.18	7418.52
7-Jun	8635.73	8617.78	8581.90	8402.92	8194.11	8074.78	8015.12
8-Jun	8913.82	8886.91	8860.00	8797.20	8743.38	8707.49	8689.55
9-Jun	9216.21	9174.93	9092.36	8994.56	8940.73	8904.85	8886.91
10-Jun	9736.04	9679.77	9623.50	9352.85	9174.93	9092.36	9051.08
11-Jun	9925.60	9887.42	9836.52	9736.04	9623.50	9468.84	9352.85
12-Jun	10279.49	10203.68	10052.04	9900.15	9811.07	9736.04	9698.53
13-Jun	10014.14	9925.60	9887.42	9792.31	9679.77	9584.84	9507.51
14-Jun	6886.04	6817.92	6727.10	6590.88	6454.65	6363.83	6295.71
15-Jun	8617.78	8599.84	8522.24	8313.43	8134.44	8015.12	7955.46
16-Jun	9003.53	8985.59	8949.70	8895.88	8833.08	8806.17	8779.26
17-Jun	9642.26	9546.17	9391.51	9195.57	9071.72	9012.50	8985.59
18-Jun	9912.87	9874.70	9823.80	9717.29	9584.84	9430.18	9314.18
19-Jun	9021.47	8994.56	8958.67	8904.85	8851.02	8815.14	8788.23
20-Jun	9314.18	9236.85	9154.29	9030.44	8967.65	8931.76	8913.82
21-Jun	9836.52	9811.07	9736.04	9623.50	9352.85	9236.85	9174.93
22-Jun	10203.68	10127.86	9976.23	9861.97	9773.56	9698.53	9661.01
23-Jun	10041.23	10071.07	10153.18	10279.49	10052.04	9925.60	9900.15
24-Jun	10032.57	10035.04	10039.99	10125.81	10317.40	10203.68	10089.95
25-Jun	9618.19	9755.90	9893.62	10036.28	10043.70	10153.18	10207.92
26-Jun	9630.94	9607.47	9618.19	9893.62	10036.28	10041.23	10043.70
27-Jun	9801.81	9939.52	10033.80	10041.23	10153.18	10262.66	10279.49
28-Jun	8761.32	8734.40	8707.49	8644.70	8590.87	8492.41	8432.75
29-Jun	9468.84	9391.51	9236.85	9113.00	9012.50	8976.62	8949.70
30-Jun	10317.40	10241.58	10089.95	9912.87	9823.80	9773.56	9717.29
1-Jul	10036.28	10038.75	10043.70	10207.92	10203.68	10052.04	9976.23
2-Jul	9618.19	9755.90	9893.62	10036.28	10043.70	10153.18	10207.92
3-Jul	9642.67	9619.20	9572.28	9847.71	10035.04	10039.99	10042.46
4-Jul	9735.22	9701.00	9654.40	9584.01	9801.81	9985.43	10033.80
5-Jul	9803.67	9769.45	9735.22	9654.40	9584.01	9710.00	9801.81
6-Jul	9000.79	9382.44	9663.26	9758.04	9677.86	9642.67	9607.47
7-Jul	8511.77	8796.56	9452.65	9792.26	9723.81	9677.86	9642.67
8-Jul	8552.05	9000.79	9522.85	9780.85	9712.41	9666.13	9630.94
9-Jul	8431.22	8552.05	9205.02	9733.47	9746.63	9701.00	9666.13
10-Jul	8390.94	8511.77	9000.79	9663.26	9758.04	9712.41	9689.59
11-Jul	8350.66	8471.50	8592.33	9593.06	9769.45	9723.81	9701.00
12-Jul	8270.11	8390.94	8511.77	9452.65	9792.26	9746.63	9723.81
13-Jul	8189.55	8270.11	8431.22	9205.02	9733.47	9769.45	9746.63
14-Jul	9663.26	9803.67	9758.04	9677.86	9607.47	9618.19	9710.00

Table A18, continued. Summer 2002 allocation scenario time series results for the pool - run guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	9607.47	9584.01	9710.00	10031.33	10038.75	10043.70	10098.44
16-Jul	9746.63	9712.41	9666.13	9595.74	9755.90	9939.52	10032.57
17-Jul	9452.65	9593.06	9792.26	9723.81	9642.67	9607.47	9572.28
18-Jul	8511.77	8796.56	9452.65	9792.26	9723.81	9677.86	9642.67
19-Jul	8431.22	8552.05	9205.02	9733.47	9746.63	9701.00	9666.13
20-Jul	8390.94	8511.77	9000.79	9663.26	9758.04	9712.41	9689.59
21-Jul	8431.22	8552.05	9205.02	9733.47	9746.63	9701.00	9666.13
22-Jul	8270.11	8390.94	8511.77	9452.65	9792.26	9746.63	9723.81
23-Jul	8390.94	8511.77	9000.79	9663.26	9758.04	9712.41	9689.59
24-Jul	8310.38	8431.22	8552.05	9522.85	9780.85	9735.22	9712.41
25-Jul	9663.26	9803.67	9758.04	9677.86	9607.47	9618.19	9710.00
26-Jul	9642.67	9619.20	9572.28	9847.71	10035.04	10039.99	10042.46
27-Jul	9847.71	9985.43	10035.04	10042.46	10180.55	10290.03	10241.58
28-Jul	10043.70	10125.81	10207.92	10203.68	9976.23	9900.15	9874.70
29-Jul	9584.01	9664.09	9801.81	10033.80	10041.23	10098.44	10153.18
30-Jul	9780.85	9746.63	9712.41	9630.94	9618.19	9801.81	9893.62
31-Jul	9000.79	9382.44	9663.26	9758.04	9677.86	9642.67	9607.47
1-Aug	8350.66	8471.50	8592.33	9593.06	9769.45	9723.81	9701.00
2-Aug	8153.97	8177.69	8310.38	8552.05	9522.85	9733.47	9780.85
3-Aug	8189.55	8270.11	8431.22	9205.02	9733.47	9769.45	9746.63
4-Aug	8511.77	8796.56	9452.65	9792.26	9723.81	9677.86	9642.67
5-Aug	9522.85	9663.26	9780.85	9712.41	9630.94	9584.01	9618.19
6-Aug	9205.02	9452.65	9733.47	9746.63	9666.13	9630.94	9595.74
7-Aug	8153.97	8177.69	8310.38	8552.05	9522.85	9733.47	9780.85
8-Aug	8094.68	8130.26	8177.69	8390.94	8796.56	9452.65	9663.26
9-Aug	7864.74	8082.82	8130.26	8229.83	8471.50	8796.56	9382.44
10-Aug	7761.64	8070.96	8118.40	8189.55	8431.22	8592.33	9205.02
11-Aug	7761.64	8070.96	8118.40	8189.55	8431.22	8592.33	9205.02
12-Aug	7658.53	7967.85	8094.68	8177.69	8390.94	8552.05	8796.56
13-Aug	8070.96	8106.54	8153.97	8310.38	8552.05	9205.02	9522.85
14-Aug	7452.31	7658.53	8070.96	8142.11	8310.38	8471.50	8552.05
15-Aug	7246.10	7452.31	7864.74	8118.40	8229.83	8350.66	8471.50
16-Aug	7246.10	7555.42	7967.85	8130.26	8229.83	8390.94	8511.77
17-Aug	7452.31	7761.64	8070.96	8153.97	8310.38	8471.50	8552.05
18-Aug	7349.20	7658.53	8070.96	8142.11	8270.11	8431.22	8511.77
19-Aug	7761.64	8070.96	8118.40	8189.55	8431.22	8592.33	9205.02
20-Aug	8070.96	8106.54	8153.97	8310.38	8552.05	9205.02	9522.85
21-Aug	7452.31	7658.53	8070.96	8142.11	8310.38	8431.22	8552.05
22-Aug	7246.10	7452.31	7864.74	8118.40	8229.83	8390.94	8471.50
23-Aug	7039.88	7349.20	7658.53	8106.54	8177.69	8310.38	8390.94
24-Aug	6972.60	7246.10	7555.42	8094.68	8165.83	8270.11	8350.66
25-Aug	7039.88	7349.20	7761.64	8106.54	8177.69	8310.38	8431.22
26-Aug	7039.88	7349.20	7761.64	8106.54	8177.69	8310.38	8431.22
27-Aug	7349.20	7555.42	7967.85	8142.11	8270.11	8431.22	8511.77

Table A18, continued. Summer 2002 allocation scenario time series results for the pool - run guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	7349.20	7555.42	7967.85	8142.11	8270.11	8431.22	8511.77
29-Aug	7452.31	7761.64	8070.96	8153.97	8310.38	8471.50	8552.05
30-Aug	7761.64	8070.96	8118.40	8189.55	8431.22	8592.33	9205.02
31-Aug	7761.64	8070.96	8118.40	8189.55	8431.22	8592.33	9205.02
1-Sep	7967.85	8094.68	8142.11	8270.11	8511.77	9000.79	9452.65
2-Sep	7864.74	8082.82	8130.26	8229.83	8471.50	8796.56	9382.44
3-Sep	7761.64	8070.96	8118.40	8189.55	8431.22	8592.33	9205.02
4-Sep	7761.64	8070.96	8118.40	8189.55	8431.22	8592.33	9205.02
5-Sep	7555.42	7864.74	8082.82	8165.83	8350.66	8511.77	8592.33
6-Sep	7142.99	7452.31	7864.74	8118.40	8189.55	8350.66	8471.50
7-Sep	7039.88	7349.20	7658.53	8106.54	8177.69	8310.38	8390.94
8-Sep	7039.88	7349.20	7658.53	8106.54	8177.69	8310.38	8390.94
9-Sep	7039.88	7246.10	7658.53	8094.68	8177.69	8310.38	8390.94
10-Sep	6972.60	7142.99	7555.42	8082.82	8165.83	8229.83	8350.66
11-Sep	6905.31	7142.99	7452.31	8082.82	8153.97	8229.83	8310.38
12-Sep	6838.03	7039.88	7452.31	8070.96	8142.11	8189.55	8310.38
13-Sep	6770.75	6972.60	7349.20	7967.85	8130.26	8177.69	8270.11
14-Sep	6770.75	6905.31	7246.10	7864.74	8130.26	8177.69	8229.83
15-Sep	6905.31	7039.88	7452.31	8070.96	8153.97	8229.83	8310.38
16-Sep	7452.31	7761.64	8070.96	8153.97	8310.38	8471.50	8552.05
17-Sep	8094.68	8130.26	8177.69	8390.94	8796.56	9452.65	9663.26
18-Sep	7967.85	8094.68	8142.11	8270.11	8511.77	9000.79	9452.65
19-Sep	7349.20	7658.53	8070.96	8142.11	8270.11	8431.22	8552.05
20-Sep	7142.99	7452.31	7864.74	8118.40	8189.55	8350.66	8471.50
21-Sep	8082.82	8118.40	8165.83	8350.66	8592.33	9382.44	9593.06
22-Sep	9712.41	9677.86	9630.94	9618.19	9893.62	10032.57	10036.28
23-Sep	10042.46	10098.44	10180.55	10241.58	10014.14	9912.87	9887.42
24-Sep	9755.90	9893.62	10032.57	10039.99	10125.81	10235.29	10317.40
25-Sep	8592.33	9205.02	9593.06	9769.45	9701.00	9654.40	9619.20
26-Sep	9642.67	9619.20	9572.28	9847.71	10035.04	10039.99	10042.46
27-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28-Sep	4038.71	3976.16	3913.62	3767.68	3642.59	3559.19	3517.50
29-Sep	7985.29	7895.80	7776.48	7597.50	7418.52	7299.19	7209.70
30-Sep	9030.44	9003.53	8967.65	8913.82	8860.00	8824.11	8797.20

Table A19. Summer 2002 allocation scenario time series results for the pool - cover guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	3642.17	3602.37	3522.76	3383.45	3264.05	3184.44	3144.64
2-Jun	4636.43	4567.64	4475.91	4338.31	4200.72	4108.99	4040.19
3-Jun	6000.54	5826.17	5593.68	5244.93	5072.15	4980.42	4911.62
4-Jun	6465.53	6349.28	6116.79	5709.92	5361.18	5163.88	5118.01
5-Jun	6581.78	6465.53	6233.04	5884.29	5477.43	5244.93	5163.88
6-Jun	4865.76	4819.89	4728.16	4567.64	4430.04	4338.31	4292.45
7-Jun	5535.55	5419.31	5186.81	5049.22	4888.69	4796.96	4751.09
8-Jun	7337.38	7163.01	6988.64	6581.78	6233.04	6000.54	5884.29
9-Jun	8329.68	8277.08	8171.89	7860.50	7511.75	7279.26	7163.01
10-Jun	9641.47	9263.16	8884.85	8514.64	8277.08	8171.89	8119.29
11-Jun	10760.40	10555.56	10282.44	9641.47	8884.85	8673.30	8514.64
12-Jun	10867.76	10859.07	10841.71	10623.84	10145.88	9641.47	9389.26
13-Jun	10837.36	10760.40	10555.56	10019.78	9263.16	8831.96	8726.19
14-Jun	3861.08	3801.38	3721.77	3602.37	3482.96	3403.35	3343.65
15-Jun	5419.31	5303.06	5140.95	4980.42	4842.82	4751.09	4705.23
16-Jun	7918.62	7802.37	7569.88	7221.14	6814.27	6639.90	6465.53
17-Jun	9010.95	8779.08	8567.53	8303.38	8145.59	7976.74	7802.37
18-Jun	10692.12	10487.28	10214.16	9515.37	8831.96	8620.42	8461.75
19-Jun	8034.87	7860.50	7628.00	7279.26	6930.52	6698.02	6523.65
20-Jun	8461.75	8355.98	8250.78	8092.99	7686.13	7453.63	7337.38
21-Jun	10282.44	10145.88	9641.47	8884.85	8514.64	8355.98	8277.08
22-Jun	10859.07	10850.39	10833.02	10419.00	9893.67	9389.26	9137.06
23-Jun	11962.07	11671.24	11404.86	10867.76	10841.71	10760.40	10623.84
24-Jun	12669.23	12467.18	12063.10	11493.65	10872.10	10859.07	10846.05
25-Jun	14001.99	13591.41	13180.83	12366.16	11760.03	11404.86	11227.27
26-Jun	14688.95	14468.91	14001.99	13180.83	12366.16	11962.07	11760.03
27-Jun	13454.55	13043.97	12568.21	11962.07	11404.86	11049.69	10867.76
28-Jun	6349.28	6174.91	6000.54	5593.68	5244.93	5118.01	5072.15
29-Jun	8673.30	8567.53	8355.98	8198.19	7976.74	7744.25	7569.88
30-Jun	10872.10	10863.42	10846.05	10692.12	10214.16	9893.67	9515.37
1-Jul	12366.16	12164.12	11760.03	11227.27	10859.07	10841.71	10833.02
2-Jul	14001.99	13591.41	13180.83	12366.16	11760.03	11404.86	11227.27
3-Jul	14798.97	14578.93	14138.85	13317.69	12467.18	12063.10	11861.05
4-Jul	15784.66	15375.45	14908.99	14248.87	13454.55	12907.11	12568.21
5-Jul	16603.08	16193.87	15784.66	14908.99	14248.87	13728.27	13454.55
6-Jul	17901.84	17131.01	16779.06	16057.47	15129.03	14798.97	14468.91
7-Jul	18652.63	18320.30	17043.02	16466.68	15648.26	15129.03	14798.97
8-Jul	18695.70	17901.84	16955.04	16330.27	15511.86	15019.01	14688.95
9-Jul	18566.50	18695.70	17483.38	16691.07	15921.06	15375.45	15019.01
10-Jul	18523.44	18652.63	17901.84	16779.06	16057.47	15511.86	15239.05
11-Jul	18480.38	18609.57	18738.76	16867.05	16193.87	15648.26	15375.45
12-Jul	18394.25	18523.44	18652.63	17043.02	16466.68	15921.06	15648.26
13-Jul	18308.12	18394.25	18566.50	17483.38	16691.07	16193.87	15921.06
14-Jul	16779.06	16603.08	16057.47	15129.03	14468.91	14001.99	13728.27

Table A19, continued. Summer 2002 allocation scenario time series results for the pool - cover guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	14468.91	14248.87	13728.27	12770.25	12164.12	11760.03	11582.44
16-Jul	15921.06	15511.86	15019.01	14358.89	13591.41	13043.97	12669.23
17-Jul	17043.02	16867.05	16466.68	15648.26	14798.97	14468.91	14138.85
18-Jul	18652.63	18320.30	17043.02	16466.68	15648.26	15129.03	14798.97
19-Jul	18566.50	18695.70	17483.38	16691.07	15921.06	15375.45	15019.01
20-Jul	18523.44	18652.63	17901.84	16779.06	16057.47	15511.86	15239.05
21-Jul	18566.50	18695.70	17483.38	16691.07	15921.06	15375.45	15019.01
22-Jul	18394.25	18523.44	18652.63	17043.02	16466.68	15921.06	15648.26
23-Jul	18523.44	18652.63	17901.84	16779.06	16057.47	15511.86	15239.05
24-Jul	18437.31	18566.50	18695.70	16955.04	16330.27	15784.66	15511.86
25-Jul	16779.06	16603.08	16057.47	15129.03	14468.91	14001.99	13728.27
26-Jul	14798.97	14578.93	14138.85	13317.69	12467.18	12063.10	11861.05
27-Jul	13317.69	12907.11	12467.18	11861.05	11316.06	10960.89	10863.42
28-Jul	11760.03	11493.65	11227.27	10859.07	10833.02	10623.84	10487.28
29-Jul	14248.87	13865.13	13454.55	12568.21	11962.07	11582.44	11404.86
30-Jul	16330.27	15921.06	15511.86	14688.95	14001.99	13454.55	13180.83
31-Jul	17901.84	17131.01	16779.06	16057.47	15129.03	14798.97	14468.91
1-Aug	18480.38	18609.57	18738.76	16867.05	16193.87	15648.26	15375.45
2-Aug	18305.41	18307.22	18437.31	18695.70	16955.04	16691.07	16330.27
3-Aug	18308.12	18394.25	18566.50	17483.38	16691.07	16193.87	15921.06
4-Aug	18652.63	18320.30	17043.02	16466.68	15648.26	15129.03	14798.97
5-Aug	16955.04	16779.06	16330.27	15511.86	14688.95	14248.87	14001.99
6-Aug	17483.38	17043.02	16691.07	15921.06	15019.01	14688.95	14358.89
7-Aug	18305.41	18307.22	18437.31	18695.70	16955.04	16691.07	16330.27
8-Aug	18300.90	18303.61	18307.22	18523.44	18320.30	17043.02	16779.06
9-Aug	18233.13	18300.00	18303.61	18351.18	18609.57	18320.30	17131.01
10-Aug	18200.14	18299.10	18302.71	18308.12	18566.50	18738.76	17483.38
11-Aug	18200.14	18299.10	18302.71	18308.12	18566.50	18738.76	17483.38
12-Aug	18167.15	18266.11	18300.90	18307.22	18523.44	18695.70	18320.30
13-Aug	18299.10	18301.80	18305.41	18437.31	18695.70	17483.38	16955.04
14-Aug	18101.18	18167.15	18299.10	18304.51	18437.31	18609.57	18695.70
15-Aug	18035.21	18101.18	18233.13	18302.71	18351.18	18480.38	18609.57
16-Aug	18035.21	18134.16	18266.11	18303.61	18351.18	18523.44	18652.63
17-Aug	18101.18	18200.14	18299.10	18305.41	18437.31	18609.57	18695.70
18-Aug	18068.19	18167.15	18299.10	18304.51	18394.25	18566.50	18652.63
19-Aug	18200.14	18299.10	18302.71	18308.12	18566.50	18738.76	17483.38
20-Aug	18299.10	18301.80	18305.41	18437.31	18695.70	17483.38	16955.04
21-Aug	18101.18	18167.15	18299.10	18304.51	18437.31	18566.50	18695.70
22-Aug	18035.21	18101.18	18233.13	18302.71	18351.18	18523.44	18609.57
23-Aug	17969.23	18068.19	18167.15	18301.80	18307.22	18437.31	18523.44
24-Aug	17760.01	18035.21	18134.16	18300.90	18306.31	18394.25	18480.38
25-Aug	17969.23	18068.19	18200.14	18301.80	18307.22	18437.31	18566.50
26-Aug	17969.23	18068.19	18200.14	18301.80	18307.22	18437.31	18566.50
27-Aug	18068.19	18134.16	18266.11	18304.51	18394.25	18566.50	18652.63

Table A19, continued. Summer 2002 allocation scenario time series results for the pool - cover guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	18068.19	18134.16	18266.11	18304.51	18394.25	18566.50	18652.63
29-Aug	18101.18	18200.14	18299.10	18305.41	18437.31	18609.57	18695.70
30-Aug	18200.14	18299.10	18302.71	18308.12	18566.50	18738.76	17483.38
31-Aug	18200.14	18299.10	18302.71	18308.12	18566.50	18738.76	17483.38
1-Sep	18266.11	18300.90	18304.51	18394.25	18652.63	17901.84	17043.02
2-Sep	18233.13	18300.00	18303.61	18351.18	18609.57	18320.30	17131.01
3-Sep	18200.14	18299.10	18302.71	18308.12	18566.50	18738.76	17483.38
4-Sep	18200.14	18299.10	18302.71	18308.12	18566.50	18738.76	17483.38
5-Sep	18134.16	18233.13	18300.00	18306.31	18480.38	18652.63	18738.76
6-Sep	18002.22	18101.18	18233.13	18302.71	18308.12	18480.38	18609.57
7-Sep	17969.23	18068.19	18167.15	18301.80	18307.22	18437.31	18523.44
8-Sep	17969.23	18068.19	18167.15	18301.80	18307.22	18437.31	18523.44
9-Sep	17969.23	18035.21	18167.15	18300.90	18307.22	18437.31	18523.44
10-Sep	17760.01	18002.22	18134.16	18300.00	18306.31	18351.18	18480.38
11-Sep	17550.79	18002.22	18101.18	18300.00	18305.41	18351.18	18437.31
12-Sep	17341.57	17969.23	18101.18	18299.10	18304.51	18308.12	18437.31
13-Sep	17132.35	17760.01	18068.19	18266.11	18303.61	18307.22	18394.25
14-Sep	17132.35	17550.79	18035.21	18233.13	18303.61	18307.22	18351.18
15-Sep	17550.79	17969.23	18101.18	18299.10	18305.41	18351.18	18437.31
16-Sep	18101.18	18200.14	18299.10	18305.41	18437.31	18609.57	18695.70
17-Sep	18300.90	18303.61	18307.22	18523.44	18320.30	17043.02	16779.06
18-Sep	18266.11	18300.90	18304.51	18394.25	18652.63	17901.84	17043.02
19-Sep	18068.19	18167.15	18299.10	18304.51	18394.25	18566.50	18695.70
20-Sep	18002.22	18101.18	18233.13	18302.71	18308.12	18480.38	18609.57
21-Sep	18300.00	18302.71	18306.31	18480.38	18738.76	17131.01	16867.05
22-Sep	15511.86	15129.03	14688.95	14001.99	13180.83	12669.23	12366.16
23-Sep	11861.05	11582.44	11316.06	10863.42	10837.36	10692.12	10555.56
24-Sep	13591.41	13180.83	12669.23	12063.10	11493.65	11138.48	10872.10
25-Sep	18738.76	17483.38	16867.05	16193.87	15375.45	14908.99	14578.93
26-Sep	14798.97	14578.93	14138.85	13317.69	12467.18	12063.10	11861.05
27-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28-Sep	1772.81	1740.56	1708.32	1633.09	1568.61	1525.62	1504.12
29-Sep	4728.16	4659.37	4567.64	4430.04	4292.45	4200.72	4131.92
30-Sep	8092.99	7918.62	7686.13	7337.38	6988.64	6756.15	6581.78

Table A20. Summer 2002 allocation scenario time series results for the algae - midge guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	3790.65	3822.78	3887.03	3999.48	4095.86	4160.11	4192.24
2-Jun	3193.85	3225.64	3268.03	3331.62	3395.20	3437.59	3469.38
3-Jun	2877.92	2891.12	2908.72	2935.12	2992.51	3034.90	3066.69
4-Jun	2842.72	2851.52	2869.12	2899.92	2926.32	2950.12	2971.31
5-Jun	2833.93	2842.72	2860.32	2886.72	2917.52	2935.12	2950.12
6-Jun	3087.88	3109.08	3151.46	3225.64	3289.23	3331.62	3352.81
7-Jun	2913.12	2921.92	2939.52	3003.10	3077.28	3119.67	3140.87
8-Jun	2776.73	2789.93	2803.13	2833.93	2860.32	2877.92	2886.72
9-Jun	3681.63	3467.83	3040.23	2737.13	2763.53	2781.13	2789.93
10-Jun	7258.97	7006.00	6753.02	4677.88	3467.83	3040.23	2826.43
11-Jun	7389.74	7458.58	7550.37	7258.97	6753.02	5567.22	4677.88
12-Jun	7621.38	7564.81	7451.65	7435.63	7596.27	7258.97	7090.32
13-Jun	7423.37	7389.74	7458.58	7511.95	7006.00	6456.57	5863.67
14-Jun	3613.95	3662.14	3726.40	3822.78	3919.16	3983.41	4031.60
15-Jun	2921.92	2930.72	2960.71	3034.90	3098.48	3140.87	3162.06
16-Jun	2732.73	2741.53	2759.13	2785.53	2816.33	2829.53	2842.72
17-Jun	6837.35	6160.12	4974.33	3574.73	2933.33	2728.33	2741.53
18-Jun	7412.69	7481.53	7573.32	7174.65	6456.57	5270.78	4381.43
19-Jun	2723.93	2737.13	2754.73	2781.13	2807.53	2825.13	2838.33
20-Jun	4381.43	3788.53	3360.93	2719.53	2750.33	2767.93	2776.73
21-Jun	7550.37	7596.27	7258.97	6753.02	4677.88	3788.53	3467.83
22-Jun	7564.81	7508.23	7395.08	7504.48	7427.62	7090.32	6921.67
23-Jun	8238.26	8124.05	7965.92	7621.38	7451.65	7389.74	7435.63
24-Jun	8453.52	8392.02	8269.01	8018.63	7649.67	7564.81	7479.94
25-Jun	8543.85	8523.99	8504.13	8361.27	8176.76	7965.92	7860.51
26-Jun	8946.04	8787.81	8543.85	8504.13	8361.27	8238.26	8176.76
27-Jun	8517.37	8497.51	8422.77	8238.26	7965.92	7755.09	7621.38
28-Jun	2851.52	2864.72	2877.92	2908.72	2935.12	2971.31	2992.51
29-Jun	5567.22	4974.33	3788.53	3147.13	2728.33	2745.93	2759.13
30-Jun	7649.67	7593.09	7479.94	7412.69	7573.32	7427.62	7174.65
1-Jul	8361.27	8299.76	8176.76	7860.51	7564.81	7451.65	7395.08
2-Jul	8543.85	8523.99	8504.13	8361.27	8176.76	7965.92	7860.51
3-Jul	9025.15	8866.92	8550.47	8510.75	8392.02	8269.01	8207.51
4-Jul	10044.19	9517.25	9104.26	8629.58	8517.37	8490.89	8422.77
5-Jul	11098.08	10571.14	10044.19	9104.26	8629.58	8530.61	8517.37
6-Jul	12439.38	11004.34	11066.83	10395.49	9262.49	9025.15	8787.81
7-Jul	14471.17	13238.35	11019.97	10922.43	9868.54	9262.49	9025.15
8-Jul	14254.25	12439.38	11035.59	10746.78	9692.90	9183.37	8946.04
9-Jul	14905.00	14254.25	11640.40	11082.46	10219.84	9517.25	9183.37
10-Jul	15121.92	14471.17	12439.38	11066.83	10395.49	9692.90	9341.60
11-Jul	15338.84	14688.08	14037.33	11051.21	10571.14	9868.54	9517.25
12-Jul	15772.67	15121.92	14471.17	11019.97	10922.43	10219.84	9868.54
13-Jul	16206.51	15772.67	14905.00	11640.40	11082.46	10571.14	10219.84
14-Jul	11066.83	11098.08	10395.49	9262.49	8787.81	8543.85	8530.61

Table A20, continued. Summer 2002 allocation scenario time series results for the algae - midge guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	8787.81	8629.58	8530.61	8484.27	8299.76	8176.76	8071.34
16-Jul	10219.84	9692.90	9183.37	8708.70	8523.99	8497.51	8453.52
17-Jul	11019.97	11051.21	10922.43	9868.54	9025.15	8787.81	8550.47
18-Jul	14471.17	13238.35	11019.97	10922.43	9868.54	9262.49	9025.15
19-Jul	14905.00	14254.25	11640.40	11082.46	10219.84	9517.25	9183.37
20-Jul	15121.92	14471.17	12439.38	11066.83	10395.49	9692.90	9341.60
21-Jul	14905.00	14254.25	11640.40	11082.46	10219.84	9517.25	9183.37
22-Jul	15772.67	15121.92	14471.17	11019.97	10922.43	10219.84	9868.54
23-Jul	15121.92	14471.17	12439.38	11066.83	10395.49	9692.90	9341.60
24-Jul	15555.76	14905.00	14254.25	11035.59	10746.78	10044.19	9692.90
25-Jul	11066.83	11098.08	10395.49	9262.49	8787.81	8543.85	8530.61
26-Jul	9025.15	8866.92	8550.47	8510.75	8392.02	8269.01	8207.51
27-Jul	8510.75	8490.89	8392.02	8207.51	7913.22	7702.38	7593.09
28-Jul	8176.76	8018.63	7860.51	7564.81	7395.08	7435.63	7481.53
29-Jul	8629.58	8537.23	8517.37	8422.77	8238.26	8071.34	7965.92
30-Jul	10746.78	10219.84	9692.90	8946.04	8543.85	8517.37	8504.13
31-Jul	12439.38	11004.34	11066.83	10395.49	9262.49	9025.15	8787.81
1-Aug	15338.84	14688.08	14037.33	11051.21	10571.14	9868.54	9517.25
2-Aug	16400.66	16271.23	15555.76	14254.25	11035.59	11082.46	10746.78
3-Aug	16206.51	15772.67	14905.00	11640.40	11082.46	10571.14	10219.84
4-Aug	14471.17	13238.35	11019.97	10922.43	9868.54	9262.49	9025.15
5-Aug	11035.59	11066.83	10746.78	9692.90	8946.04	8629.58	8543.85
6-Aug	11640.40	11019.97	11082.46	10219.84	9183.37	8946.04	8708.70
7-Aug	16400.66	16271.23	15555.76	14254.25	11035.59	11082.46	10746.78
8-Aug	16724.24	16530.09	16271.23	15121.92	13238.35	11019.97	11066.83
9-Aug	17023.62	16788.95	16530.09	15989.59	14688.08	13238.35	11004.34
10-Aug	17108.60	16853.67	16594.81	16206.51	14905.00	14037.33	11640.40
11-Aug	17108.60	16853.67	16594.81	16206.51	14905.00	14037.33	11640.40
12-Aug	17193.58	16938.65	16724.24	16271.23	15121.92	14254.25	13238.35
13-Aug	16853.67	16659.52	16400.66	15555.76	14254.25	11640.40	11035.59
14-Aug	17363.53	17193.58	16853.67	16465.37	15555.76	14688.08	14254.25
15-Aug	17533.49	17363.53	17023.62	16594.81	15989.59	15338.84	14688.08
16-Aug	17533.49	17278.55	16938.65	16530.09	15989.59	15121.92	14471.17
17-Aug	17363.53	17108.60	16853.67	16400.66	15555.76	14688.08	14254.25
18-Aug	17448.51	17193.58	16853.67	16465.37	15772.67	14905.00	14471.17
19-Aug	17108.60	16853.67	16594.81	16206.51	14905.00	14037.33	11640.40
20-Aug	16853.67	16659.52	16400.66	15555.76	14254.25	11640.40	11035.59
21-Aug	17363.53	17193.58	16853.67	16465.37	15555.76	14905.00	14254.25
22-Aug	17533.49	17363.53	17023.62	16594.81	15989.59	15121.92	14688.08
23-Aug	17703.44	17448.51	17193.58	16659.52	16271.23	15555.76	15121.92
24-Aug	17838.42	17533.49	17278.55	16724.24	16335.94	15772.67	15338.84
25-Aug	17703.44	17448.51	17108.60	16659.52	16271.23	15555.76	14905.00
26-Aug	17703.44	17448.51	17108.60	16659.52	16271.23	15555.76	14905.00
27-Aug	17448.51	17278.55	16938.65	16465.37	15772.67	14905.00	14471.17

Table A20, continued. Summer 2002 allocation scenario time series results for the algae - midge guild at the Laurel Hill Farm study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	17448.51	17278.55	16938.65	16465.37	15772.67	14905.00	14471.17
29-Aug	17363.53	17108.60	16853.67	16400.66	15555.76	14688.08	14254.25
30-Aug	17108.60	16853.67	16594.81	16206.51	14905.00	14037.33	11640.40
31-Aug	17108.60	16853.67	16594.81	16206.51	14905.00	14037.33	11640.40
1-Sep	16938.65	16724.24	16465.37	15772.67	14471.17	12439.38	11019.97
2-Sep	17023.62	16788.95	16530.09	15989.59	14688.08	13238.35	11004.34
3-Sep	17108.60	16853.67	16594.81	16206.51	14905.00	14037.33	11640.40
4-Sep	17108.60	16853.67	16594.81	16206.51	14905.00	14037.33	11640.40
5-Sep	17278.55	17023.62	16788.95	16335.94	15338.84	14471.17	14037.33
6-Sep	17618.46	17363.53	17023.62	16594.81	16206.51	15338.84	14688.08
7-Sep	17703.44	17448.51	17193.58	16659.52	16271.23	15555.76	15121.92
8-Sep	17703.44	17448.51	17193.58	16659.52	16271.23	15555.76	15121.92
9-Sep	17703.44	17533.49	17193.58	16724.24	16271.23	15555.76	15121.92
10-Sep	17838.42	17618.46	17278.55	16788.95	16335.94	15989.59	15338.84
11-Sep	17973.39	17618.46	17363.53	16788.95	16400.66	15989.59	15555.76
12-Sep	18108.37	17703.44	17363.53	16853.67	16465.37	16206.51	15555.76
13-Sep	18243.35	17838.42	17448.51	16938.65	16530.09	16271.23	15772.67
14-Sep	18243.35	17973.39	17533.49	17023.62	16530.09	16271.23	15989.59
15-Sep	17973.39	17703.44	17363.53	16853.67	16400.66	15989.59	15555.76
16-Sep	17363.53	17108.60	16853.67	16400.66	15555.76	14688.08	14254.25
17-Sep	16724.24	16530.09	16271.23	15121.92	13238.35	11019.97	11066.83
18-Sep	16938.65	16724.24	16465.37	15772.67	14471.17	12439.38	11019.97
19-Sep	17448.51	17193.58	16853.67	16465.37	15772.67	14905.00	14254.25
20-Sep	17618.46	17363.53	17023.62	16594.81	16206.51	15338.84	14688.08
21-Sep	16788.95	16594.81	16335.94	15338.84	14037.33	11004.34	11051.21
22-Sep	9692.90	9262.49	8946.04	8543.85	8504.13	8453.52	8361.27
23-Sep	8207.51	8071.34	7913.22	7593.09	7423.37	7412.69	7458.58
24-Sep	8523.99	8504.13	8453.52	8269.01	8018.63	7807.80	7649.67
25-Sep	14037.33	11640.40	11051.21	10571.14	9517.25	9104.26	8866.92
26-Sep	9025.15	8866.92	8550.47	8510.75	8392.02	8269.01	8207.51
27-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28-Sep	4461.03	4412.53	4364.03	4250.87	4153.87	4089.20	4056.87
29-Sep	3151.46	3183.26	3225.64	3289.23	3352.81	3395.20	3426.99
30-Sep	2719.53	2732.73	2750.33	2776.73	2803.13	2820.73	2833.93

Table A21. Summer 1999 allocation scenario time series results for the riffle guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	15649.60	15515.31	15363.50	15111.00	14808.91	14532.04	14267.78
2-Jun	17302.54	17085.54	16896.29	16175.14	15824.78	15591.21	15515.31
3-Jun	17743.99	17827.05	17931.48	17953.53	17302.54	16950.13	16869.38
4-Jun	17658.56	17715.51	17827.05	17983.70	17628.03	17302.54	16977.04
5-Jun	17957.59	18009.81	17845.03	17194.04	16842.46	16335.24	16116.75
6-Jun	17879.27	17931.48	18035.92	17411.04	16923.21	16815.55	16495.35
7-Jun	17827.05	17905.38	17983.70	17628.03	16977.04	16869.38	16815.55
8-Jun	17743.99	17827.05	17931.48	17953.53	17302.54	16950.13	16869.38
9-Jun	17613.08	17479.31	17300.95	17658.56	17827.05	17931.48	18009.81
10-Jun	17657.67	17568.49	17390.13	17515.00	17800.94	17879.27	17957.59
11-Jun	17327.62	17488.18	17648.74	17434.72	17428.79	17687.04	17743.99
12-Jun	16979.15	17220.58	17434.66	17657.67	17390.13	17342.57	17601.21
13-Jun	16979.15	17220.58	17434.66	17657.67	17390.13	17342.57	17601.21
14-Jun	16979.15	17220.58	17434.66	17657.67	17390.13	17342.57	17601.21
15-Jun	16979.15	17220.58	17434.66	17657.67	17390.13	17342.57	17601.21
16-Jun	16979.15	17220.58	17434.66	17657.67	17390.13	17342.57	17601.21
17-Jun	17488.18	17595.22	17613.08	17300.95	17658.56	17772.46	17827.05
18-Jun	17541.70	17648.74	17568.49	17256.36	17687.04	17800.94	17853.16
19-Jun	17073.11	17274.10	17488.18	17613.08	17345.54	17428.79	17658.56
20-Jun	16979.15	17167.06	17381.14	17702.26	17390.13	17256.36	17515.00
21-Jun	16979.15	17167.06	17381.14	17702.26	17390.13	17256.36	17515.00
22-Jun	16885.20	17073.11	17327.62	17648.74	17434.72	17300.95	17428.79
23-Jun	16603.34	16791.25	17167.06	17488.18	17568.49	17390.13	17300.95
24-Jun	16321.48	16603.34	16885.20	17381.14	17702.26	17523.90	17434.72
25-Jun	16321.48	16603.34	16885.20	17381.14	17702.26	17523.90	17434.72
26-Jun	16415.44	16603.34	16979.15	17434.66	17657.67	17479.31	17390.13
27-Jun	16603.34	16791.25	17167.06	17488.18	17568.49	17390.13	17300.95
28-Jun	17073.11	17274.10	17488.18	17613.08	17345.54	17428.79	17658.56
29-Jun	16979.15	17220.58	17434.66	17657.67	17390.13	17342.57	17601.21
30-Jun	16979.15	17220.58	17434.66	17657.67	17390.13	17342.57	17601.21
1-Jul	16979.15	17220.58	17434.66	17657.67	17390.13	17342.57	17601.21
2-Jul	16979.15	17220.58	17434.66	17657.67	17390.13	17342.57	17601.21
3-Jul	16415.44	16603.34	16979.15	17434.66	17657.67	17479.31	17390.13
4-Jul	15754.50	15849.11	16038.32	16415.44	17073.11	17327.62	17434.66
5-Jul	15451.14	15754.50	15896.41	16227.53	16791.25	17167.06	17274.10
6-Jul	15754.50	15849.11	16038.32	16415.44	17073.11	17327.62	17434.66
7-Jul	16085.62	16227.53	16603.34	17167.06	17488.18	17702.26	17568.49
8-Jul	15991.02	16085.62	16321.48	16885.20	17327.62	17541.70	17702.26
9-Jul	15801.80	15896.41	16085.62	16509.39	17167.06	17381.14	17488.18
10-Jul	15801.80	15896.41	16085.62	16509.39	17167.06	17381.14	17488.18
11-Jul	15653.38	15801.80	15991.02	16415.44	16979.15	17274.10	17381.14
12-Jul	15653.38	15801.80	15991.02	16415.44	16979.15	17274.10	17381.14
13-Jul	15653.38	15801.80	15991.02	16415.44	16979.15	17274.10	17381.14
14-Jul	15754.50	15849.11	16038.32	16415.44	17073.11	17327.62	17434.66

Table A21, continued. Summer 1999 allocation scenario time series results for the riffle guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	15653.38	15801.80	15991.02	16415.44	16979.15	17274.10	17381.14
16-Jul	15653.38	15801.80	15991.02	16415.44	16979.15	17274.10	17381.14
17-Jul	15552.26	15801.80	15943.71	16321.48	16885.20	17220.58	17327.62
18-Jul	15552.26	15801.80	15943.71	16321.48	16885.20	17220.58	17327.62
19-Jul	15451.14	15754.50	15896.41	16227.53	16791.25	17167.06	17274.10
20-Jul	15451.14	15754.50	15896.41	16227.53	16791.25	17167.06	17274.10
21-Jul	15451.14	15754.50	15896.41	16227.53	16791.25	17167.06	17274.10
22-Jul	15849.11	15943.71	16132.92	16603.34	17220.58	17381.14	17541.70
23-Jul	16791.25	16979.15	17274.10	17595.22	17479.31	17345.54	17342.57
24-Jul	17220.58	17381.14	17595.22	17523.90	17256.36	17601.21	17715.51
25-Jul	16132.92	16321.48	16697.29	17220.58	17541.70	17657.67	17523.90
26-Jul	15991.02	16132.92	16415.44	16979.15	17381.14	17595.22	17657.67
27-Jul	15849.11	15943.71	16132.92	16603.34	17220.58	17381.14	17541.70
28-Jul	15849.11	15943.71	16132.92	16603.34	17220.58	17381.14	17541.70
29-Jul	15801.80	15896.41	16085.62	16509.39	17167.06	17381.14	17488.18
30-Jul	15849.11	15943.71	16132.92	16603.34	17220.58	17381.14	17541.70
31-Jul	15849.11	15943.71	16132.92	16603.34	17220.58	17381.14	17541.70
1-Aug	15849.11	15943.71	16132.92	16603.34	17220.58	17381.14	17541.70
2-Aug	15849.11	15943.71	16132.92	16603.34	17220.58	17381.14	17541.70
3-Aug	15849.11	15943.71	16132.92	16603.34	17220.58	17381.14	17541.70
4-Aug	15849.11	15943.71	16132.92	16603.34	17220.58	17381.14	17541.70
5-Aug	15849.11	15943.71	16132.92	16603.34	17220.58	17381.14	17541.70
6-Aug	15801.80	15896.41	16085.62	16509.39	17167.06	17381.14	17488.18
7-Aug	15801.80	15896.41	16085.62	16509.39	17167.06	17381.14	17488.18
8-Aug	15801.80	15896.41	16085.62	16509.39	17167.06	17381.14	17488.18
9-Aug	15849.11	15943.71	16132.92	16603.34	17220.58	17381.14	17541.70
10-Aug	15849.11	15943.71	16132.92	16603.34	17220.58	17381.14	17541.70
11-Aug	15754.50	15849.11	16038.32	16415.44	17073.11	17327.62	17434.66
12-Aug	15552.26	15801.80	15943.71	16321.48	16885.20	17220.58	17327.62
13-Aug	15754.50	15849.11	16038.32	16415.44	17073.11	17327.62	17434.66
14-Aug	16132.92	16321.48	16697.29	17220.58	17541.70	17657.67	17523.90
15-Aug	16791.25	16979.15	17274.10	17595.22	17479.31	17345.54	17342.57
16-Aug	16979.15	17220.58	17434.66	17657.67	17390.13	17342.57	17601.21
17-Aug	16180.23	16415.44	16697.29	17274.10	17595.22	17613.08	17523.90
18-Aug	16038.32	16180.23	16509.39	17073.11	17434.66	17648.74	17613.08
19-Aug	15991.02	16085.62	16321.48	16885.20	17327.62	17541.70	17702.26
20-Aug	16321.48	16603.34	16885.20	17381.14	17702.26	17523.90	17434.72
21-Aug	17327.62	17488.18	17648.74	17434.72	17428.79	17687.04	17743.99
22-Aug	17167.06	17327.62	17541.70	17568.49	17300.95	17515.00	17687.04
23-Aug	16896.29	16815.55	16175.14	15824.78	15515.31	15363.50	15249.65
24-Aug	16815.55	16335.24	15999.96	15649.60	15401.46	15249.65	15111.00
25-Aug	15999.96	15883.17	15649.60	15401.46	15111.00	14909.61	14808.91
26-Aug	17519.54	17194.04	16950.13	16495.35	15941.57	15708.00	15591.21
27-Aug	17772.46	17853.16	17957.59	17845.03	17194.04	16923.21	16842.46

Table A21, continued. Summer 1999 allocation scenario time series results for the riffle guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	15439.41	15363.50	15211.70	14859.26	14443.95	14091.61	13915.44
29-Aug	12208.35	12077.31	11815.22	11423.33	11032.68	10772.25	10576.92
30-Aug	13625.59	13423.83	13020.32	12546.21	12208.35	11946.27	11815.22
31-Aug	15708.00	15553.26	15401.46	15161.35	14859.26	14620.12	14355.87
1-Sep	17194.04	16977.04	16869.38	16175.14	15766.39	15553.26	15477.36
2-Sep	17827.05	17905.38	17983.70	17628.03	16977.04	16869.38	16815.55
3-Sep	17658.56	17743.99	17853.16	18009.81	17628.03	17194.04	16950.13
4-Sep	17601.21	17687.04	17800.94	17957.59	17736.53	17411.04	17085.54
5-Sep	14758.56	14620.12	14267.78	13726.47	13020.32	12709.62	12600.68
6-Sep	3359.82	3311.59	3215.11	2971.24	2686.72	2564.78	2442.84
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10-Sep	457.85	453.34	444.32	430.79	415.00	408.23	401.46
11-Sep	1659.60	1642.61	1608.63	1557.65	1498.19	1472.70	1447.22
12-Sep	4324.58	4252.22	4155.74	4011.03	3866.32	3769.84	3697.49
13-Sep	6940.39	6776.21	6557.31	6228.96	5900.61	5681.72	5578.75
14-Sep	9600.29	9470.08	9209.64	8818.99	8363.23	8199.06	8034.88
15-Sep	11097.79	10902.47	10642.03	10251.38	9860.73	9600.29	9404.97
16-Sep	1455.71	1438.72	1404.74	1353.77	1300.28	1271.08	1256.48
17-Sep	752.74	738.14	708.94	657.83	614.03	599.96	595.45
18-Sep	1190.77	1168.87	1139.67	1095.86	1052.06	1022.86	1000.96
19-Sep	4396.93	4348.69	4252.22	4107.51	3938.67	3866.32	3793.96
20-Sep	5626.99	5554.63	5458.16	5313.45	5168.73	5072.26	4999.90
21-Sep	5458.16	5409.92	5313.45	5144.61	4999.90	4903.43	4855.19
22-Sep	1132.37	1117.77	1088.56	1044.76	993.66	971.76	949.85
23-Sep	444.32	437.55	430.79	415.00	401.46	392.44	387.93
24-Sep	1154.27	1139.67	1110.46	1059.36	1015.56	986.36	971.76
25-Sep	2889.95	2768.01	2605.43	2361.55	2117.68	1955.10	1897.46
26-Sep	4806.95	4758.71	4662.24	4493.41	4348.69	4252.22	4203.98
27-Sep	6338.41	6174.24	5955.34	5626.99	5482.28	5385.80	5313.45
28-Sep	7761.26	7597.08	7378.18	7049.84	6721.49	6502.59	6338.41
29-Sep	7104.56	6940.39	6721.49	6393.14	6064.79	5845.89	5681.72
30-Sep	541.31	534.55	525.52	511.99	498.46	489.43	482.67

Table A22. Summer 1999 allocation scenario time series results for the fast generalist guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	15264.73	15234.63	15287.00	15189.09	14738.24	14537.39	14461.54
2-Jun	16427.24	16171.11	16104.86	15771.27	15433.58	15208.45	15234.63
3-Jun	17549.47	17482.46	17411.89	17195.63	16427.24	16063.65	16125.46
4-Jun	17623.53	17574.16	17482.46	17376.61	16811.43	16427.24	16043.05
5-Jun	17394.25	17358.97	17067.56	16299.18	16146.06	15870.12	15714.99
6-Jun	17447.18	17411.89	17341.33	16555.30	16084.25	16166.66	15968.96
7-Jun	17482.46	17429.54	17376.61	16811.43	16043.05	16125.46	16166.66
8-Jun	17549.47	17482.46	17411.89	17195.63	16427.24	16063.65	16125.46
9-Jun	17112.36	17068.55	17010.13	17623.53	17482.46	17411.89	17358.97
10-Jun	17126.97	17097.76	17039.34	17422.42	17500.10	17447.18	17394.25
11-Jun	17238.97	17197.23	17155.48	17053.95	17280.13	17598.84	17549.47
12-Jun	17015.80	17266.80	17211.14	17126.97	17039.34	17137.83	17564.72
13-Jun	17015.80	17266.80	17211.14	17126.97	17039.34	17137.83	17564.72
14-Jun	17015.80	17266.80	17211.14	17126.97	17039.34	17137.83	17564.72
15-Jun	17015.80	17266.80	17211.14	17126.97	17039.34	17137.83	17564.72
16-Jun	17015.80	17266.80	17211.14	17126.97	17039.34	17137.83	17564.72
17-Jun	17197.23	17169.40	17112.36	17010.13	17623.53	17524.79	17482.46
18-Jun	17183.31	17155.48	17097.76	16995.53	17598.84	17500.10	17464.82
19-Jun	17148.26	17252.88	17197.23	17112.36	17024.74	17280.13	17623.53
20-Jun	17015.80	17280.71	17225.05	17141.57	17039.34	16995.53	17422.42
21-Jun	17015.80	17280.71	17225.05	17141.57	17039.34	16995.53	17422.42
22-Jun	16883.35	17148.26	17238.97	17155.48	17053.95	17010.13	17280.13
23-Jun	16485.98	16750.89	17280.71	17197.23	17097.76	17039.34	17010.13
24-Jun	16088.62	16485.98	16883.35	17225.05	17141.57	17083.15	17053.95
25-Jun	16088.62	16485.98	16883.35	17225.05	17141.57	17083.15	17053.95
26-Jun	16221.07	16485.98	17015.80	17211.14	17126.97	17068.55	17039.34
27-Jun	16485.98	16750.89	17280.71	17197.23	17097.76	17039.34	17010.13
28-Jun	17148.26	17252.88	17197.23	17112.36	17024.74	17280.13	17623.53
29-Jun	17015.80	17266.80	17211.14	17126.97	17039.34	17137.83	17564.72
30-Jun	17015.80	17266.80	17211.14	17126.97	17039.34	17137.83	17564.72
1-Jul	17015.80	17266.80	17211.14	17126.97	17039.34	17137.83	17564.72
2-Jul	17015.80	17266.80	17211.14	17126.97	17039.34	17137.83	17564.72
3-Jul	16221.07	16485.98	17015.80	17211.14	17126.97	17068.55	17039.34
4-Jul	14957.89	15157.54	15556.85	16221.07	17148.26	17238.97	17211.14
5-Jul	14549.82	14957.89	15257.37	15956.16	16750.89	17280.71	17252.88
6-Jul	14957.89	15157.54	15556.85	16221.07	17148.26	17238.97	17211.14
7-Jul	15656.68	15956.16	16485.98	17280.71	17197.23	17141.57	17097.76
8-Jul	15457.03	15656.68	16088.62	16883.35	17238.97	17183.31	17141.57
9-Jul	15057.72	15257.37	15656.68	16353.53	17280.71	17225.05	17197.23
10-Jul	15057.72	15257.37	15656.68	16353.53	17280.71	17225.05	17197.23
11-Jul	14821.87	15057.72	15457.03	16221.07	17015.80	17252.88	17225.05
12-Jul	14821.87	15057.72	15457.03	16221.07	17015.80	17252.88	17225.05
13-Jul	14821.87	15057.72	15457.03	16221.07	17015.80	17252.88	17225.05
14-Jul	14957.89	15157.54	15556.85	16221.07	17148.26	17238.97	17211.14

Table A22, continued. Summer 1999 allocation scenario time series results for the fast generalist guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	14821.87	15057.72	15457.03	16221.07	17015.80	17252.88	17225.05
16-Jul	14821.87	15057.72	15457.03	16221.07	17015.80	17252.88	17225.05
17-Jul	14685.85	15057.72	15357.20	16088.62	16883.35	17266.80	17238.97
18-Jul	14685.85	15057.72	15357.20	16088.62	16883.35	17266.80	17238.97
19-Jul	14549.82	14957.89	15257.37	15956.16	16750.89	17280.71	17252.88
20-Jul	14549.82	14957.89	15257.37	15956.16	16750.89	17280.71	17252.88
21-Jul	14549.82	14957.89	15257.37	15956.16	16750.89	17280.71	17252.88
22-Jul	15157.54	15357.20	15756.51	16485.98	17266.80	17225.05	17183.31
23-Jul	16750.89	17015.80	17252.88	17169.40	17068.55	17024.74	17137.83
24-Jul	17266.80	17225.05	17169.40	17083.15	16995.53	17564.72	17574.16
25-Jul	15756.51	16088.62	16618.44	17266.80	17183.31	17126.97	17083.15
26-Jul	15457.03	15756.51	16221.07	17015.80	17225.05	17169.40	17126.97
27-Jul	15157.54	15357.20	15756.51	16485.98	17266.80	17225.05	17183.31
28-Jul	15157.54	15357.20	15756.51	16485.98	17266.80	17225.05	17183.31
29-Jul	15057.72	15257.37	15656.68	16353.53	17280.71	17225.05	17197.23
30-Jul	15157.54	15357.20	15756.51	16485.98	17266.80	17225.05	17183.31
31-Jul	15157.54	15357.20	15756.51	16485.98	17266.80	17225.05	17183.31
1-Aug	15157.54	15357.20	15756.51	16485.98	17266.80	17225.05	17183.31
2-Aug	15157.54	15357.20	15756.51	16485.98	17266.80	17225.05	17183.31
3-Aug	15157.54	15357.20	15756.51	16485.98	17266.80	17225.05	17183.31
4-Aug	15157.54	15357.20	15756.51	16485.98	17266.80	17225.05	17183.31
5-Aug	15157.54	15357.20	15756.51	16485.98	17266.80	17225.05	17183.31
6-Aug	15057.72	15257.37	15656.68	16353.53	17280.71	17225.05	17197.23
7-Aug	15057.72	15257.37	15656.68	16353.53	17280.71	17225.05	17197.23
8-Aug	15057.72	15257.37	15656.68	16353.53	17280.71	17225.05	17197.23
9-Aug	15157.54	15357.20	15756.51	16485.98	17266.80	17225.05	17183.31
10-Aug	15157.54	15357.20	15756.51	16485.98	17266.80	17225.05	17183.31
11-Aug	14957.89	15157.54	15556.85	16221.07	17148.26	17238.97	17211.14
12-Aug	14685.85	15057.72	15357.20	16088.62	16883.35	17266.80	17238.97
13-Aug	14957.89	15157.54	15556.85	16221.07	17148.26	17238.97	17211.14
14-Aug	15756.51	16088.62	16618.44	17266.80	17183.31	17126.97	17083.15
15-Aug	16750.89	17015.80	17252.88	17169.40	17068.55	17024.74	17137.83
16-Aug	17015.80	17266.80	17211.14	17126.97	17039.34	17137.83	17564.72
17-Aug	15856.33	16221.07	16618.44	17252.88	17169.40	17112.36	17083.15
18-Aug	15556.85	15856.33	16353.53	17148.26	17211.14	17155.48	17112.36
19-Aug	15457.03	15656.68	16088.62	16883.35	17238.97	17183.31	17141.57
20-Aug	16088.62	16485.98	16883.35	17225.05	17141.57	17083.15	17053.95
21-Aug	17238.97	17197.23	17155.48	17053.95	17280.13	17598.84	17549.47
22-Aug	17280.71	17238.97	17183.31	17097.76	17010.13	17422.42	17598.84
23-Aug	16104.86	16166.66	15771.27	15433.58	15234.63	15287.00	15326.28
24-Aug	16166.66	15870.12	15602.42	15264.73	15273.91	15326.28	15189.09
25-Aug	15602.42	15489.86	15264.73	15273.91	15189.09	14888.52	14738.24
26-Aug	16683.37	16299.18	16063.65	15968.96	15546.14	15321.01	15208.45
27-Aug	17524.79	17464.82	17394.25	17067.56	16299.18	16084.25	16146.06

Table A22, continued. Summer 1999 allocation scenario time series results for the fast generalist guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Microhabitat Index						
	Site Q	+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	15260.82	15287.00	15339.37	14813.38	14512.11	14410.96	14360.40
29-Aug	12832.86	12631.55	12228.95	11784.87	11500.64	11311.15	11169.04
30-Aug	14205.41	14075.72	13816.33	13310.07	12832.86	12430.25	12228.95
31-Aug	15321.01	15221.54	15273.91	15264.23	14813.38	14562.67	14486.82
1-Sep	16299.18	16043.05	16125.46	15771.27	15377.30	15221.54	15247.73
2-Sep	17482.46	17429.54	17376.61	16811.43	16043.05	16125.46	16166.66
3-Sep	17623.53	17549.47	17464.82	17358.97	16811.43	16299.18	16063.65
4-Sep	17564.72	17598.84	17500.10	17394.25	16939.50	16555.30	16171.11
5-Sep	14663.10	14562.67	14461.54	14270.26	13816.33	13536.01	13385.38
6-Sep	4712.94	4655.75	4541.36	4092.65	3569.16	3344.81	3120.45
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10-Sep	600.73	595.10	583.83	566.92	547.20	538.75	530.30
11-Sep	1787.99	1763.97	1715.94	1643.89	1559.83	1523.80	1487.77
12-Sep	5856.79	5771.01	5656.62	5485.04	5313.46	5199.08	5113.29
13-Sep	8436.54	8307.10	8134.51	7875.62	7616.74	7444.15	7343.81
14-Sep	10458.45	10363.71	10174.22	9889.99	9558.38	9428.94	9299.49
15-Sep	11548.01	11405.90	11216.41	10932.17	10647.94	10458.45	10316.33
16-Sep	1499.78	1475.76	1427.73	1355.68	1304.41	1282.61	1271.71
17-Sep	895.68	884.78	862.98	824.83	792.13	778.23	772.59
18-Sep	1222.66	1206.32	1184.52	1151.82	1119.12	1097.32	1080.97
19-Sep	5942.58	5885.39	5771.01	5599.43	5399.25	5313.46	5227.67
20-Sep	7401.00	7315.21	7200.83	7029.25	6857.67	6743.28	6657.49
21-Sep	7200.83	7143.63	7029.25	6829.07	6657.49	6543.11	6485.92
22-Sep	1179.07	1168.17	1146.37	1113.67	1075.52	1059.17	1042.82
23-Sep	583.83	575.38	566.92	547.20	530.30	519.03	513.39
24-Sep	1195.42	1184.52	1162.72	1124.57	1091.87	1070.07	1059.17
25-Sep	3943.08	3718.73	3419.59	2970.88	2522.17	2223.04	2124.23
26-Sep	6428.72	6371.53	6257.14	6056.97	5885.39	5771.01	5713.81
27-Sep	7961.92	7832.48	7659.89	7401.00	7229.42	7115.04	7029.25
28-Sep	9083.76	8954.31	8781.72	8522.84	8263.95	8091.36	7961.92
29-Sep	8565.99	8436.54	8263.95	8005.07	7746.18	7573.59	7444.15
30-Sep	704.98	696.52	685.25	668.35	651.44	640.18	631.72

Table A23. Summer 1999 allocation scenario time series results for the pool – run guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	12811.16	12777.14	12829.77	12809.74	12591.71	12469.48	12395.13
2-Jun	13729.01	13645.54	13588.54	13354.18	12992.16	12750.82	12777.14
3-Jun	14603.59	14459.73	14264.81	13979.42	13729.01	13598.71	13583.45
4-Jun	14746.30	14651.16	14459.73	14167.35	13854.22	13729.01	13603.80
5-Jun	14216.08	14118.62	13937.69	13687.27	13578.37	13408.96	13293.84
6-Jun	14362.27	14264.81	14069.89	13770.74	13593.63	13573.28	13463.73
7-Jun	14459.73	14313.54	14167.35	13854.22	13603.80	13583.45	13573.28
8-Jun	14603.59	14459.73	14264.81	13979.42	13729.01	13598.71	13583.45
9-Jun	14390.72	14426.19	14473.49	14746.30	14459.73	14264.81	14118.62
10-Jun	14378.89	14402.54	14449.84	14675.16	14508.46	14362.27	14216.08
11-Jun	14102.79	14216.05	14329.32	14438.01	14611.87	14698.73	14603.59
12-Jun	13971.80	14027.27	14178.29	14378.89	14449.84	14548.59	14738.44
13-Jun	13971.80	14027.27	14178.29	14378.89	14449.84	14548.59	14738.44
14-Jun	13971.80	14027.27	14178.29	14378.89	14449.84	14548.59	14738.44
15-Jun	13971.80	14027.27	14178.29	14378.89	14449.84	14548.59	14738.44
16-Jun	13971.80	14027.27	14178.29	14378.89	14449.84	14548.59	14738.44
17-Jun	14216.05	14291.56	14390.72	14473.49	14746.30	14556.03	14459.73
18-Jun	14253.80	14329.32	14402.54	14485.31	14698.73	14508.46	14411.00
19-Jun	13980.66	14065.03	14216.05	14390.72	14461.66	14611.87	14746.30
20-Jun	13971.80	13989.52	14140.54	14367.07	14449.84	14485.31	14675.16
21-Jun	13971.80	13989.52	14140.54	14367.07	14449.84	14485.31	14675.16
22-Jun	13962.94	13980.66	14102.79	14329.32	14438.01	14473.49	14611.87
23-Jun	13936.37	13954.08	13989.52	14216.05	14402.54	14449.84	14473.49
24-Jun	13909.79	13936.37	13962.94	14140.54	14367.07	14414.37	14438.01
25-Jun	13909.79	13936.37	13962.94	14140.54	14367.07	14414.37	14438.01
26-Jun	13918.65	13936.37	13971.80	14178.29	14378.89	14426.19	14449.84
27-Jun	13936.37	13954.08	13989.52	14216.05	14402.54	14449.84	14473.49
28-Jun	13980.66	14065.03	14216.05	14390.72	14461.66	14611.87	14746.30
29-Jun	13971.80	14027.27	14178.29	14378.89	14449.84	14548.59	14738.44
30-Jun	13971.80	14027.27	14178.29	14378.89	14449.84	14548.59	14738.44
1-Jul	13971.80	14027.27	14178.29	14378.89	14449.84	14548.59	14738.44
2-Jul	13971.80	14027.27	14178.29	14378.89	14449.84	14548.59	14738.44
3-Jul	13918.65	13936.37	13971.80	14178.29	14378.89	14426.19	14449.84
4-Jul	13092.59	13254.26	13577.59	13918.65	13980.66	14102.79	14178.29
5-Jul	12610.50	13092.59	13335.09	13900.93	13954.08	13989.52	14065.03
6-Jul	13092.59	13254.26	13577.59	13918.65	13980.66	14102.79	14178.29
7-Jul	13658.43	13900.93	13936.37	13989.52	14216.05	14367.07	14402.54
8-Jul	13496.76	13658.43	13909.79	13962.94	14102.79	14253.80	14367.07
9-Jul	13173.42	13335.09	13658.43	13927.51	13989.52	14140.54	14216.05
10-Jul	13173.42	13335.09	13658.43	13927.51	13989.52	14140.54	14216.05
11-Jul	12931.89	13173.42	13496.76	13918.65	13971.80	14065.03	14140.54
12-Jul	12931.89	13173.42	13496.76	13918.65	13971.80	14065.03	14140.54
13-Jul	12931.89	13173.42	13496.76	13918.65	13971.80	14065.03	14140.54
14-Jul	13092.59	13254.26	13577.59	13918.65	13980.66	14102.79	14178.29

Table A23, continued. Summer 1999 allocation scenario time series results for the fast generalist guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	12931.89	13173.42	13496.76	13918.65	13971.80	14065.03	14140.54
16-Jul	12931.89	13173.42	13496.76	13918.65	13971.80	14065.03	14140.54
17-Jul	12771.19	13173.42	13415.93	13909.79	13962.94	14027.27	14102.79
18-Jul	12771.19	13173.42	13415.93	13909.79	13962.94	14027.27	14102.79
19-Jul	12610.50	13092.59	13335.09	13900.93	13954.08	13989.52	14065.03
20-Jul	12610.50	13092.59	13335.09	13900.93	13954.08	13989.52	14065.03
21-Jul	12610.50	13092.59	13335.09	13900.93	13954.08	13989.52	14065.03
22-Jul	13254.26	13415.93	13739.26	13936.37	14027.27	14140.54	14253.80
23-Jul	13954.08	13971.80	14065.03	14291.56	14426.19	14461.66	14548.59
24-Jul	14027.27	14140.54	14291.56	14414.37	14485.31	14738.44	14651.16
25-Jul	13739.26	13909.79	13945.22	14027.27	14253.80	14378.89	14414.37
26-Jul	13496.76	13739.26	13918.65	13971.80	14140.54	14291.56	14378.89
27-Jul	13254.26	13415.93	13739.26	13936.37	14027.27	14140.54	14253.80
28-Jul	13254.26	13415.93	13739.26	13936.37	14027.27	14140.54	14253.80
29-Jul	13173.42	13335.09	13658.43	13927.51	13989.52	14140.54	14216.05
30-Jul	13254.26	13415.93	13739.26	13936.37	14027.27	14140.54	14253.80
31-Jul	13254.26	13415.93	13739.26	13936.37	14027.27	14140.54	14253.80
1-Aug	13254.26	13415.93	13739.26	13936.37	14027.27	14140.54	14253.80
2-Aug	13254.26	13415.93	13739.26	13936.37	14027.27	14140.54	14253.80
3-Aug	13254.26	13415.93	13739.26	13936.37	14027.27	14140.54	14253.80
4-Aug	13254.26	13415.93	13739.26	13936.37	14027.27	14140.54	14253.80
5-Aug	13254.26	13415.93	13739.26	13936.37	14027.27	14140.54	14253.80
6-Aug	13173.42	13335.09	13658.43	13927.51	13989.52	14140.54	14216.05
7-Aug	13173.42	13335.09	13658.43	13927.51	13989.52	14140.54	14216.05
8-Aug	13173.42	13335.09	13658.43	13927.51	13989.52	14140.54	14216.05
9-Aug	13254.26	13415.93	13739.26	13936.37	14027.27	14140.54	14253.80
10-Aug	13254.26	13415.93	13739.26	13936.37	14027.27	14140.54	14253.80
11-Aug	13092.59	13254.26	13577.59	13918.65	13980.66	14102.79	14178.29
12-Aug	12771.19	13173.42	13415.93	13909.79	13962.94	14027.27	14102.79
13-Aug	13092.59	13254.26	13577.59	13918.65	13980.66	14102.79	14178.29
14-Aug	13739.26	13909.79	13945.22	14027.27	14253.80	14378.89	14414.37
15-Aug	13954.08	13971.80	14065.03	14291.56	14426.19	14461.66	14548.59
16-Aug	13971.80	14027.27	14178.29	14378.89	14449.84	14548.59	14738.44
17-Aug	13820.10	13918.65	13945.22	14065.03	14291.56	14390.72	14414.37
18-Aug	13577.59	13820.10	13927.51	13980.66	14178.29	14329.32	14390.72
19-Aug	13496.76	13658.43	13909.79	13962.94	14102.79	14253.80	14367.07
20-Aug	13909.79	13936.37	13962.94	14140.54	14367.07	14414.37	14438.01
21-Aug	14102.79	14216.05	14329.32	14438.01	14611.87	14698.73	14603.59
22-Aug	13989.52	14102.79	14253.80	14402.54	14473.49	14675.16	14698.73
23-Aug	13588.54	13573.28	13354.18	12992.16	12777.14	12829.77	12869.25
24-Aug	13573.28	13408.96	13173.17	12811.16	12816.62	12869.25	12809.74
25-Aug	13173.17	13052.50	12811.16	12816.62	12809.74	12664.39	12591.71
26-Aug	13812.48	13687.27	13598.71	13463.73	13112.84	12871.49	12750.82
27-Aug	14556.03	14411.00	14216.08	13937.69	13687.27	13593.63	13578.37

Table A23, continued. Summer 1999 allocation scenario time series results for the fast generalist guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	12803.46	12829.77	12882.41	12628.05	12444.69	12345.57	12296.00
29-Aug	11418.30	11375.42	11289.67	11086.84	10809.81	10625.12	10486.61
30-Aug	12217.52	12163.82	12056.43	11721.24	11418.30	11332.54	11289.67
31-Aug	12871.49	12763.98	12816.62	12846.07	12628.05	12494.26	12419.91
1-Sep	13687.27	13603.80	13583.45	13354.18	12931.83	12763.98	12790.30
2-Sep	14459.73	14313.54	14167.35	13854.22	13603.80	13583.45	13573.28
3-Sep	14746.30	14603.59	14411.00	14118.62	13854.22	13687.27	13598.71
4-Sep	14738.44	14698.73	14508.46	14216.08	13895.95	13770.74	13645.54
5-Sep	12555.38	12494.26	12395.13	12244.37	12056.43	11890.13	11777.53
6-Sep	5225.32	5170.37	5060.46	4726.93	4337.81	4171.05	4004.28
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10-Sep	1286.65	1272.53	1244.30	1201.94	1152.53	1131.35	1110.17
11-Sep	3082.59	3069.32	3042.79	3002.98	2956.54	2936.63	2916.73
12-Sep	6324.39	6241.96	6132.06	5967.19	5802.33	5692.43	5610.00
13-Sep	8340.29	8273.77	8185.08	8052.04	7919.00	7830.31	7753.19
14-Sep	9794.04	9701.69	9517.01	9239.98	8916.78	8850.26	8783.74
15-Sep	10855.98	10717.46	10532.78	10255.75	9978.72	9794.04	9655.52
16-Sep	2923.36	2910.10	2883.56	2843.75	2776.58	2733.47	2711.91
17-Sep	1968.14	1946.59	1903.47	1828.01	1763.34	1731.38	1717.26
18-Sep	2614.90	2582.56	2539.44	2474.77	2410.09	2366.97	2334.64
19-Sep	6406.82	6351.87	6241.96	6077.10	5884.76	5802.33	5719.90
20-Sep	7808.14	7725.71	7615.80	7450.94	7286.08	7176.17	7093.74
21-Sep	7615.80	7560.85	7450.94	7258.60	7093.74	6983.84	6928.88
22-Sep	2528.66	2507.10	2463.99	2399.31	2323.86	2291.52	2259.18
23-Sep	1244.30	1223.12	1201.94	1152.53	1110.17	1081.94	1067.82
24-Sep	2561.00	2539.44	2496.33	2420.87	2356.20	2313.08	2291.52
25-Sep	4615.75	4448.99	4226.63	3893.10	3559.57	3337.22	3268.36
26-Sep	6873.93	6818.98	6709.07	6516.73	6351.87	6241.96	6187.01
27-Sep	8096.39	8029.87	7941.18	7808.14	7643.28	7533.37	7450.94
28-Sep	8672.88	8606.36	8517.67	8384.63	8251.60	8162.91	8096.39
29-Sep	8406.81	8340.29	8251.60	8118.56	7985.52	7896.83	7830.31
30-Sep	1547.84	1526.67	1498.43	1456.07	1413.72	1385.48	1364.30

Table A24. Summer 1999 allocation scenario time series results for the pool – run guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	2874.68	2938.66	2993.63	3078.59	3168.57	3192.72	3183.95
2-Jun	2506.85	2524.57	2555.31	2546.25	2765.20	2911.17	2938.66
3-Jun	2555.62	2564.17	2511.13	2453.69	2506.85	2540.72	2562.60
4-Jun	2522.89	2544.71	2564.17	2484.61	2480.27	2506.85	2533.43
5-Jun	2497.87	2471.35	2462.55	2515.71	2569.90	2553.99	2582.74
6-Jun	2537.65	2511.13	2458.09	2497.99	2548.02	2577.19	2561.72
7-Jun	2564.17	2524.39	2484.61	2480.27	2533.43	2562.60	2577.19
8-Jun	2555.62	2564.17	2511.13	2453.69	2506.85	2540.72	2562.60
9-Jun	3284.05	3303.05	3328.37	2522.89	2564.17	2511.13	2471.35
10-Jun	3277.72	3290.38	3315.71	2789.86	2577.43	2537.65	2497.87
11-Jun	3066.42	3154.26	3242.11	3309.38	2971.47	2533.80	2555.62
12-Jun	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
13-Jun	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
14-Jun	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
15-Jun	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
16-Jun	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
17-Jun	3154.26	3212.83	3284.05	3328.37	2522.89	2566.52	2564.17
18-Jun	3183.54	3242.11	3290.38	3334.70	2533.80	2577.43	2550.91
19-Jun	2974.79	3037.13	3154.26	3284.05	3322.04	2971.47	2522.89
20-Jun	2971.01	2978.57	3095.70	3271.39	3315.71	3334.70	2789.86
21-Jun	2971.01	2978.57	3095.70	3271.39	3315.71	3334.70	2789.86
22-Jun	2967.24	2974.79	3066.42	3242.11	3309.38	3328.37	2971.47
23-Jun	2955.90	2963.46	2978.57	3154.26	3290.38	3315.71	3328.37
24-Jun	2944.57	2955.90	2967.24	3095.70	3271.39	3296.71	3309.38
25-Jun	2944.57	2955.90	2967.24	3095.70	3271.39	3296.71	3309.38
26-Jun	2948.35	2955.90	2971.01	3124.98	3277.72	3303.05	3315.71
27-Jun	2955.90	2963.46	2978.57	3154.26	3290.38	3315.71	3328.37
28-Jun	2974.79	3037.13	3154.26	3284.05	3322.04	2971.47	2522.89
29-Jun	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
30-Jun	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
1-Jul	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
2-Jul	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
3-Jul	2948.35	2955.90	2971.01	3124.98	3277.72	3303.05	3315.71
4-Jul	2987.21	2977.93	2959.36	2948.35	2974.79	3066.42	3124.98
5-Jul	3179.38	2987.21	2973.28	2940.79	2963.46	2978.57	3037.13
6-Jul	2987.21	2977.93	2959.36	2948.35	2974.79	3066.42	3124.98
7-Jul	2954.72	2940.79	2955.90	2978.57	3154.26	3271.39	3290.38
8-Jul	2964.00	2954.72	2944.57	2967.24	3066.42	3183.54	3271.39
9-Jul	2982.57	2973.28	2954.72	2952.12	2978.57	3095.70	3154.26
10-Jul	2982.57	2973.28	2954.72	2952.12	2978.57	3095.70	3154.26
11-Jul	3051.27	2982.57	2964.00	2948.35	2971.01	3037.13	3095.70
12-Jul	3051.27	2982.57	2964.00	2948.35	2971.01	3037.13	3095.70
13-Jul	3051.27	2982.57	2964.00	2948.35	2971.01	3037.13	3095.70
14-Jul	2987.21	2977.93	2959.36	2948.35	2974.79	3066.42	3124.98

Table A24, continued. Summer 1999 allocation scenario time series results for the pool – run guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	3051.27	2982.57	2964.00	2948.35	2971.01	3037.13	3095.70
16-Jul	3051.27	2982.57	2964.00	2948.35	2971.01	3037.13	3095.70
17-Jul	3115.32	2982.57	2968.64	2944.57	2967.24	3007.85	3066.42
18-Jul	3115.32	2982.57	2968.64	2944.57	2967.24	3007.85	3066.42
19-Jul	3179.38	2987.21	2973.28	2940.79	2963.46	2978.57	3037.13
20-Jul	3179.38	2987.21	2973.28	2940.79	2963.46	2978.57	3037.13
21-Jul	3179.38	2987.21	2973.28	2940.79	2963.46	2978.57	3037.13
22-Jul	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
23-Jul	2963.46	2971.01	3037.13	3212.83	3303.05	3322.04	3153.09
24-Jul	3007.85	3095.70	3212.83	3296.71	3334.70	2608.25	2544.71
25-Jul	2950.07	2944.57	2959.68	3007.85	3183.54	3277.72	3296.71
26-Jul	2964.00	2950.07	2948.35	2971.01	3095.70	3212.83	3277.72
27-Jul	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
28-Jul	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
29-Jul	2982.57	2973.28	2954.72	2952.12	2978.57	3095.70	3154.26
30-Jul	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
31-Jul	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
1-Aug	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
2-Aug	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
3-Aug	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
4-Aug	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
5-Aug	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
6-Aug	2982.57	2973.28	2954.72	2952.12	2978.57	3095.70	3154.26
7-Aug	2982.57	2973.28	2954.72	2952.12	2978.57	3095.70	3154.26
8-Aug	2982.57	2973.28	2954.72	2952.12	2978.57	3095.70	3154.26
9-Aug	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
10-Aug	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
11-Aug	2987.21	2977.93	2959.36	2948.35	2974.79	3066.42	3124.98
12-Aug	3115.32	2982.57	2968.64	2944.57	2967.24	3007.85	3066.42
13-Aug	2987.21	2977.93	2959.36	2948.35	2974.79	3066.42	3124.98
14-Aug	2950.07	2944.57	2959.68	3007.85	3183.54	3277.72	3296.71
15-Aug	2963.46	2971.01	3037.13	3212.83	3303.05	3322.04	3153.09
16-Aug	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
17-Aug	2945.43	2948.35	2959.68	3037.13	3212.83	3284.05	3296.71
18-Aug	2959.36	2945.43	2952.12	2974.79	3124.98	3242.11	3284.05
19-Aug	2964.00	2954.72	2944.57	2967.24	3066.42	3183.54	3271.39
20-Aug	2944.57	2955.90	2967.24	3095.70	3271.39	3296.71	3309.38
21-Aug	3066.42	3154.26	3242.11	3309.38	2971.47	2533.80	2555.62
22-Aug	2978.57	3066.42	3183.54	3290.38	3328.37	2789.86	2533.80
23-Aug	2555.31	2577.19	2546.25	2765.20	2938.66	2993.63	3034.86
24-Aug	2577.19	2553.99	2655.73	2874.68	2979.89	3034.86	3078.59
25-Aug	2655.73	2728.71	2874.68	2979.89	3078.59	3138.58	3168.57
26-Aug	2489.13	2515.71	2540.72	2561.72	2692.22	2838.19	2911.17
27-Aug	2566.52	2550.91	2497.87	2462.55	2515.71	2548.02	2569.90

Table A24, continued. Summer 1999 allocation scenario time series results for the pool – run guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	2966.14	2993.63	3048.60	3153.57	3189.79	3178.11	3172.26
29-Aug	2925.73	2930.24	2939.25	2994.85	3092.52	3157.63	3206.47
30-Aug	3145.34	3121.35	3073.36	2986.42	2925.73	2934.75	2939.25
31-Aug	2838.19	2924.91	2979.89	3063.60	3153.57	3195.64	3186.87
1-Sep	2515.71	2533.43	2562.60	2546.25	2801.69	2924.91	2952.40
2-Sep	2564.17	2524.39	2484.61	2480.27	2533.43	2562.60	2577.19
3-Sep	2522.89	2555.62	2550.91	2471.35	2480.27	2515.71	2540.72
4-Sep	2608.25	2533.80	2577.43	2497.87	2471.41	2497.99	2524.57
5-Sep	3183.56	3195.64	3183.95	3157.34	3073.36	3024.18	2999.01
6-Sep	4184.02	4198.27	4226.76	3571.16	2806.29	2478.49	2150.69
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10-Sep	581.47	577.37	569.16	556.86	542.49	536.34	530.18
11-Sep	638.58	632.47	620.26	601.93	580.55	571.38	562.22
12-Sep	3899.07	3920.44	3948.94	3991.68	4034.42	4062.92	4084.29
13-Sep	3632.25	3617.52	3597.88	3568.41	3538.95	3519.30	3528.64
14-Sep	3450.65	3483.20	3548.32	3645.99	3759.94	3745.21	3730.47
15-Sep	3076.24	3125.08	3190.19	3287.86	3385.53	3450.65	3499.48
16-Sep	565.27	559.16	546.95	528.62	532.23	540.00	543.89
17-Sep	678.01	681.89	689.67	703.27	714.94	710.73	706.62
18-Sep	561.38	567.22	574.99	586.65	598.31	606.09	611.92
19-Sep	3877.70	3891.95	3920.44	3963.18	4013.05	4034.42	4055.79
20-Sep	3514.39	3535.76	3564.26	3607.00	3649.74	3678.24	3699.61
21-Sep	3564.26	3578.50	3607.00	3656.86	3699.61	3728.10	3742.35
22-Sep	576.93	580.82	588.60	600.26	613.86	619.70	625.53
23-Sep	569.16	563.01	556.86	542.49	530.18	521.98	517.87
24-Sep	571.10	574.99	582.76	596.37	608.03	615.81	619.70
25-Sep	3352.63	3024.82	2587.76	1932.16	1276.55	839.49	724.11
26-Sep	3756.60	3770.84	3799.34	3849.20	3891.95	3920.44	3934.69
27-Sep	3578.23	3563.50	3543.86	3514.39	3557.13	3585.63	3607.00
28-Sep	3705.92	3691.19	3671.54	3642.08	3612.61	3592.97	3578.23
29-Sep	3646.99	3632.25	3612.61	3583.14	3553.68	3534.03	3519.30
30-Sep	657.38	651.23	643.02	630.71	618.40	610.20	604.04

Table A25. Summer 1999 allocation scenario time series results for the pool – cover guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	2874.68	2938.66	2993.63	3078.59	3168.57	3192.72	3183.95
2-Jun	2506.85	2524.57	2555.31	2546.25	2765.20	2911.17	2938.66
3-Jun	2555.62	2564.17	2511.13	2453.69	2506.85	2540.72	2562.60
4-Jun	2522.89	2544.71	2564.17	2484.61	2480.27	2506.85	2533.43
5-Jun	2497.87	2471.35	2462.55	2515.71	2569.90	2553.99	2582.74
6-Jun	2537.65	2511.13	2458.09	2497.99	2548.02	2577.19	2561.72
7-Jun	2564.17	2524.39	2484.61	2480.27	2533.43	2562.60	2577.19
8-Jun	2555.62	2564.17	2511.13	2453.69	2506.85	2540.72	2562.60
9-Jun	3284.05	3303.05	3328.37	2522.89	2564.17	2511.13	2471.35
10-Jun	3277.72	3290.38	3315.71	2789.86	2577.43	2537.65	2497.87
11-Jun	3066.42	3154.26	3242.11	3309.38	2971.47	2533.80	2555.62
12-Jun	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
13-Jun	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
14-Jun	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
15-Jun	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
16-Jun	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
17-Jun	3154.26	3212.83	3284.05	3328.37	2522.89	2566.52	2564.17
18-Jun	3183.54	3242.11	3290.38	3334.70	2533.80	2577.43	2550.91
19-Jun	2974.79	3037.13	3154.26	3284.05	3322.04	2971.47	2522.89
20-Jun	2971.01	2978.57	3095.70	3271.39	3315.71	3334.70	2789.86
21-Jun	2971.01	2978.57	3095.70	3271.39	3315.71	3334.70	2789.86
22-Jun	2967.24	2974.79	3066.42	3242.11	3309.38	3328.37	2971.47
23-Jun	2955.90	2963.46	2978.57	3154.26	3290.38	3315.71	3328.37
24-Jun	2944.57	2955.90	2967.24	3095.70	3271.39	3296.71	3309.38
25-Jun	2944.57	2955.90	2967.24	3095.70	3271.39	3296.71	3309.38
26-Jun	2948.35	2955.90	2971.01	3124.98	3277.72	3303.05	3315.71
27-Jun	2955.90	2963.46	2978.57	3154.26	3290.38	3315.71	3328.37
28-Jun	2974.79	3037.13	3154.26	3284.05	3322.04	2971.47	2522.89
29-Jun	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
30-Jun	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
1-Jul	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
2-Jul	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
3-Jul	2948.35	2955.90	2971.01	3124.98	3277.72	3303.05	3315.71
4-Jul	2987.21	2977.93	2959.36	2948.35	2974.79	3066.42	3124.98
5-Jul	3179.38	2987.21	2973.28	2940.79	2963.46	2978.57	3037.13
6-Jul	2987.21	2977.93	2959.36	2948.35	2974.79	3066.42	3124.98
7-Jul	2954.72	2940.79	2955.90	2978.57	3154.26	3271.39	3290.38
8-Jul	2964.00	2954.72	2944.57	2967.24	3066.42	3183.54	3271.39
9-Jul	2982.57	2973.28	2954.72	2952.12	2978.57	3095.70	3154.26
10-Jul	2982.57	2973.28	2954.72	2952.12	2978.57	3095.70	3154.26
11-Jul	3051.27	2982.57	2964.00	2948.35	2971.01	3037.13	3095.70
12-Jul	3051.27	2982.57	2964.00	2948.35	2971.01	3037.13	3095.70
13-Jul	3051.27	2982.57	2964.00	2948.35	2971.01	3037.13	3095.70
14-Jul	2987.21	2977.93	2959.36	2948.35	2974.79	3066.42	3124.98

Table A25, continued. Summer 1999 allocation scenario time series results for the pool – cover guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	3051.27	2982.57	2964.00	2948.35	2971.01	3037.13	3095.70
16-Jul	3051.27	2982.57	2964.00	2948.35	2971.01	3037.13	3095.70
17-Jul	3115.32	2982.57	2968.64	2944.57	2967.24	3007.85	3066.42
18-Jul	3115.32	2982.57	2968.64	2944.57	2967.24	3007.85	3066.42
19-Jul	3179.38	2987.21	2973.28	2940.79	2963.46	2978.57	3037.13
20-Jul	3179.38	2987.21	2973.28	2940.79	2963.46	2978.57	3037.13
21-Jul	3179.38	2987.21	2973.28	2940.79	2963.46	2978.57	3037.13
22-Jul	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
23-Jul	2963.46	2971.01	3037.13	3212.83	3303.05	3322.04	3153.09
24-Jul	3007.85	3095.70	3212.83	3296.71	3334.70	2608.25	2544.71
25-Jul	2950.07	2944.57	2959.68	3007.85	3183.54	3277.72	3296.71
26-Jul	2964.00	2950.07	2948.35	2971.01	3095.70	3212.83	3277.72
27-Jul	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
28-Jul	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
29-Jul	2982.57	2973.28	2954.72	2952.12	2978.57	3095.70	3154.26
30-Jul	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
31-Jul	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
1-Aug	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
2-Aug	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
3-Aug	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
4-Aug	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
5-Aug	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
6-Aug	2982.57	2973.28	2954.72	2952.12	2978.57	3095.70	3154.26
7-Aug	2982.57	2973.28	2954.72	2952.12	2978.57	3095.70	3154.26
8-Aug	2982.57	2973.28	2954.72	2952.12	2978.57	3095.70	3154.26
9-Aug	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
10-Aug	2977.93	2968.64	2950.07	2955.90	3007.85	3095.70	3183.54
11-Aug	2987.21	2977.93	2959.36	2948.35	2974.79	3066.42	3124.98
12-Aug	3115.32	2982.57	2968.64	2944.57	2967.24	3007.85	3066.42
13-Aug	2987.21	2977.93	2959.36	2948.35	2974.79	3066.42	3124.98
14-Aug	2950.07	2944.57	2959.68	3007.85	3183.54	3277.72	3296.71
15-Aug	2963.46	2971.01	3037.13	3212.83	3303.05	3322.04	3153.09
16-Aug	2971.01	3007.85	3124.98	3277.72	3315.71	3153.09	2608.25
17-Aug	2945.43	2948.35	2959.68	3037.13	3212.83	3284.05	3296.71
18-Aug	2959.36	2945.43	2952.12	2974.79	3124.98	3242.11	3284.05
19-Aug	2964.00	2954.72	2944.57	2967.24	3066.42	3183.54	3271.39
20-Aug	2944.57	2955.90	2967.24	3095.70	3271.39	3296.71	3309.38
21-Aug	3066.42	3154.26	3242.11	3309.38	2971.47	2533.80	2555.62
22-Aug	2978.57	3066.42	3183.54	3290.38	3328.37	2789.86	2533.80
23-Aug	2555.31	2577.19	2546.25	2765.20	2938.66	2993.63	3034.86
24-Aug	2577.19	2553.99	2655.73	2874.68	2979.89	3034.86	3078.59
25-Aug	2655.73	2728.71	2874.68	2979.89	3078.59	3138.58	3168.57
26-Aug	2489.13	2515.71	2540.72	2561.72	2692.22	2838.19	2911.17
27-Aug	2566.52	2550.91	2497.87	2462.55	2515.71	2548.02	2569.90

Table A25, continued. Summer 1999 allocation scenario time series results for the pool – cover guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	2966.14	2993.63	3048.60	3153.57	3189.79	3178.11	3172.26
29-Aug	2925.73	2930.24	2939.25	2994.85	3092.52	3157.63	3206.47
30-Aug	3145.34	3121.35	3073.36	2986.42	2925.73	2934.75	2939.25
31-Aug	2838.19	2924.91	2979.89	3063.60	3153.57	3195.64	3186.87
1-Sep	2515.71	2533.43	2562.60	2546.25	2801.69	2924.91	2952.40
2-Sep	2564.17	2524.39	2484.61	2480.27	2533.43	2562.60	2577.19
3-Sep	2522.89	2555.62	2550.91	2471.35	2480.27	2515.71	2540.72
4-Sep	2608.25	2533.80	2577.43	2497.87	2471.41	2497.99	2524.57
5-Sep	3183.56	3195.64	3183.95	3157.34	3073.36	3024.18	2999.01
6-Sep	4184.02	4198.27	4226.76	3571.16	2806.29	2478.49	2150.69
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10-Sep	581.47	577.37	569.16	556.86	542.49	536.34	530.18
11-Sep	638.58	632.47	620.26	601.93	580.55	571.38	562.22
12-Sep	3899.07	3920.44	3948.94	3991.68	4034.42	4062.92	4084.29
13-Sep	3632.25	3617.52	3597.88	3568.41	3538.95	3519.30	3528.64
14-Sep	3450.65	3483.20	3548.32	3645.99	3759.94	3745.21	3730.47
15-Sep	3076.24	3125.08	3190.19	3287.86	3385.53	3450.65	3499.48
16-Sep	565.27	559.16	546.95	528.62	532.23	540.00	543.89
17-Sep	678.01	681.89	689.67	703.27	714.94	710.73	706.62
18-Sep	561.38	567.22	574.99	586.65	598.31	606.09	611.92
19-Sep	3877.70	3891.95	3920.44	3963.18	4013.05	4034.42	4055.79
20-Sep	3514.39	3535.76	3564.26	3607.00	3649.74	3678.24	3699.61
21-Sep	3564.26	3578.50	3607.00	3656.86	3699.61	3728.10	3742.35
22-Sep	576.93	580.82	588.60	600.26	613.86	619.70	625.53
23-Sep	569.16	563.01	556.86	542.49	530.18	521.98	517.87
24-Sep	571.10	574.99	582.76	596.37	608.03	615.81	619.70
25-Sep	3352.63	3024.82	2587.76	1932.16	1276.55	839.49	724.11
26-Sep	3756.60	3770.84	3799.34	3849.20	3891.95	3920.44	3934.69
27-Sep	3578.23	3563.50	3543.86	3514.39	3557.13	3585.63	3607.00
28-Sep	3705.92	3691.19	3671.54	3642.08	3612.61	3592.97	3578.23
29-Sep	3646.99	3632.25	3612.61	3583.14	3553.68	3534.03	3519.30
30-Sep	657.38	651.23	643.02	630.71	618.40	610.20	604.04

Table A26. Summer 1999 allocation scenario time series results for the algae – midge guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	3884.44	4045.70	4440.77	4897.13	5080.99	4903.69	4545.81
2-Jun	5351.71	5119.31	4855.27	4210.92	3993.26	3848.16	4045.70
3-Jun	5628.06	5760.38	5940.27	6048.92	5351.71	4953.83	4805.99
4-Jun	5497.03	5584.38	5760.38	6030.21	5700.32	5351.71	5003.11
5-Jun	5985.24	6075.18	5932.72	5235.51	4756.71	4335.05	4174.64
6-Jun	5850.32	5940.27	6120.15	5467.91	4904.55	4707.43	4459.18
7-Jun	5760.38	5895.29	6030.21	5700.32	5003.11	4805.99	4707.43
8-Jun	5628.06	5760.38	5940.27	6048.92	5351.71	4953.83	4805.99
9-Jun	3952.54	4153.41	4421.23	5497.03	5760.38	5940.27	6075.18
10-Jun	3885.59	4019.50	4287.32	5146.19	5715.41	5850.32	5985.24
11-Jun	3898.86	3864.48	3830.09	4220.37	4926.86	5540.71	5628.06
12-Jun	3950.68	3921.79	3875.94	3885.59	4287.32	4707.52	5365.52
13-Jun	3950.68	3921.79	3875.94	3885.59	4287.32	4707.52	5365.52
14-Jun	3950.68	3921.79	3875.94	3885.59	4287.32	4707.52	5365.52
15-Jun	3950.68	3921.79	3875.94	3885.59	4287.32	4707.52	5365.52
16-Jun	3950.68	3921.79	3875.94	3885.59	4287.32	4707.52	5365.52
17-Jun	3864.48	3841.55	3952.54	4421.23	5497.03	5671.73	5760.38
18-Jun	3853.02	3830.09	4019.50	4488.19	5540.71	5715.41	5805.35
19-Jun	3941.97	3910.33	3864.48	3952.54	4354.28	4926.86	5497.03
20-Jun	3950.68	3933.25	3887.40	3818.63	4287.32	4488.19	5146.19
21-Jun	3950.68	3933.25	3887.40	3818.63	4287.32	4488.19	5146.19
22-Jun	3959.40	3941.97	3898.86	3830.09	4220.37	4421.23	4926.86
23-Jun	3985.54	3968.11	3933.25	3864.48	4019.50	4287.32	4421.23
24-Jun	4011.69	3985.54	3959.40	3887.40	3818.63	4086.45	4220.37
25-Jun	4011.69	3985.54	3959.40	3887.40	3818.63	4086.45	4220.37
26-Jun	4002.97	3985.54	3950.68	3875.94	3885.59	4153.41	4287.32
27-Jun	3985.54	3968.11	3933.25	3864.48	4019.50	4287.32	4421.23
28-Jun	3941.97	3910.33	3864.48	3952.54	4354.28	4926.86	5497.03
29-Jun	3950.68	3921.79	3875.94	3885.59	4287.32	4707.52	5365.52
30-Jun	3950.68	3921.79	3875.94	3885.59	4287.32	4707.52	5365.52
1-Jul	3950.68	3921.79	3875.94	3885.59	4287.32	4707.52	5365.52
2-Jul	3950.68	3921.79	3875.94	3885.59	4287.32	4707.52	5365.52
3-Jul	4002.97	3985.54	3950.68	3875.94	3885.59	4153.41	4287.32
4-Jul	3953.90	3967.20	3993.80	4002.97	3941.97	3898.86	3875.94
5-Jul	3856.75	3953.90	3973.85	4020.40	3968.11	3933.25	3910.33
6-Jul	3953.90	3967.20	3993.80	4002.97	3941.97	3898.86	3875.94
7-Jul	4000.45	4020.40	3985.54	3933.25	3864.48	3818.63	4019.50
8-Jul	3987.15	4000.45	4011.69	3959.40	3898.86	3853.02	3818.63
9-Jul	3960.55	3973.85	4000.45	3994.26	3933.25	3887.40	3864.48
10-Jul	3960.55	3973.85	4000.45	3994.26	3933.25	3887.40	3864.48
11-Jul	3921.52	3960.55	3987.15	4002.97	3950.68	3910.33	3887.40
12-Jul	3921.52	3960.55	3987.15	4002.97	3950.68	3910.33	3887.40
13-Jul	3921.52	3960.55	3987.15	4002.97	3950.68	3910.33	3887.40
14-Jul	3953.90	3967.20	3993.80	4002.97	3941.97	3898.86	3875.94

Table A26, continued. Summer 1999 allocation scenario time series results for the algae – midge guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	3921.52	3960.55	3987.15	4002.97	3950.68	3910.33	3887.40
16-Jul	3921.52	3960.55	3987.15	4002.97	3950.68	3910.33	3887.40
17-Jul	3889.13	3960.55	3980.50	4011.69	3959.40	3921.79	3898.86
18-Jul	3889.13	3960.55	3980.50	4011.69	3959.40	3921.79	3898.86
19-Jul	3856.75	3953.90	3973.85	4020.40	3968.11	3933.25	3910.33
20-Jul	3856.75	3953.90	3973.85	4020.40	3968.11	3933.25	3910.33
21-Jul	3856.75	3953.90	3973.85	4020.40	3968.11	3933.25	3910.33
22-Jul	3967.20	3980.50	4007.10	3985.54	3921.79	3887.40	3853.02
23-Jul	3968.11	3950.68	3910.33	3841.55	4153.41	4354.28	4707.52
24-Jul	3921.79	3887.40	3841.55	4086.45	4488.19	5365.52	5584.38
25-Jul	4007.10	4011.69	3976.83	3921.79	3853.02	3885.59	4086.45
26-Jul	3987.15	4007.10	4002.97	3950.68	3887.40	3841.55	3885.59
27-Jul	3967.20	3980.50	4007.10	3985.54	3921.79	3887.40	3853.02
28-Jul	3967.20	3980.50	4007.10	3985.54	3921.79	3887.40	3853.02
29-Jul	3960.55	3973.85	4000.45	3994.26	3933.25	3887.40	3864.48
30-Jul	3967.20	3980.50	4007.10	3985.54	3921.79	3887.40	3853.02
31-Jul	3967.20	3980.50	4007.10	3985.54	3921.79	3887.40	3853.02
1-Aug	3967.20	3980.50	4007.10	3985.54	3921.79	3887.40	3853.02
2-Aug	3967.20	3980.50	4007.10	3985.54	3921.79	3887.40	3853.02
3-Aug	3967.20	3980.50	4007.10	3985.54	3921.79	3887.40	3853.02
4-Aug	3967.20	3980.50	4007.10	3985.54	3921.79	3887.40	3853.02
5-Aug	3967.20	3980.50	4007.10	3985.54	3921.79	3887.40	3853.02
6-Aug	3960.55	3973.85	4000.45	3994.26	3933.25	3887.40	3864.48
7-Aug	3960.55	3973.85	4000.45	3994.26	3933.25	3887.40	3864.48
8-Aug	3960.55	3973.85	4000.45	3994.26	3933.25	3887.40	3864.48
9-Aug	3967.20	3980.50	4007.10	3985.54	3921.79	3887.40	3853.02
10-Aug	3967.20	3980.50	4007.10	3985.54	3921.79	3887.40	3853.02
11-Aug	3953.90	3967.20	3993.80	4002.97	3941.97	3898.86	3875.94
12-Aug	3889.13	3960.55	3980.50	4011.69	3959.40	3921.79	3898.86
13-Aug	3953.90	3967.20	3993.80	4002.97	3941.97	3898.86	3875.94
14-Aug	4007.10	4011.69	3976.83	3921.79	3853.02	3885.59	4086.45
15-Aug	3968.11	3950.68	3910.33	3841.55	4153.41	4354.28	4707.52
16-Aug	3950.68	3921.79	3875.94	3885.59	4287.32	4707.52	5365.52
17-Aug	4013.75	4002.97	3976.83	3910.33	3841.55	3952.54	4086.45
18-Aug	3993.80	4013.75	3994.26	3941.97	3875.94	3830.09	3952.54
19-Aug	3987.15	4000.45	4011.69	3959.40	3898.86	3853.02	3818.63
20-Aug	4011.69	3985.54	3959.40	3887.40	3818.63	4086.45	4220.37
21-Aug	3898.86	3864.48	3830.09	4220.37	4926.86	5540.71	5628.06
22-Aug	3933.25	3898.86	3853.02	4019.50	4421.23	5146.19	5540.71
23-Aug	4855.27	4707.43	4210.92	3993.26	4045.70	4440.77	4737.08
24-Aug	4707.43	4335.05	4102.09	3884.44	4342.01	4737.08	4897.13
25-Aug	4102.09	4029.54	3884.44	4342.01	4897.13	5019.70	5080.99
26-Aug	5584.12	5235.51	4953.83	4459.18	4065.82	3920.71	3848.16
27-Aug	5671.73	5805.35	5985.24	5932.72	5235.51	4904.55	4756.71

Table A26, continued. Summer 1999 allocation scenario time series results for the algae – midge guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	4243.24	4440.77	4835.85	5050.34	4784.39	4307.23	4068.64
29-Aug	4138.69	3739.56	2941.28	2363.48	2405.28	2433.15	2454.05
30-Aug	3982.92	4016.49	4083.62	4227.73	4138.69	3340.42	2941.28
31-Aug	3920.71	3946.93	4342.01	4866.49	5050.34	5022.98	4665.10
1-Sep	5235.51	5003.11	4805.99	4210.92	3956.99	3946.93	4144.47
2-Sep	5760.38	5895.29	6030.21	5700.32	5003.11	4805.99	4707.43
3-Sep	5497.03	5628.06	5805.35	6075.18	5700.32	5235.51	4953.83
4-Sep	5365.52	5540.71	5715.41	5985.24	5816.52	5467.91	5119.31
5-Sep	5111.63	5022.98	4545.81	3966.13	4083.62	4161.40	4205.62
6-Sep	2622.67	2634.69	2658.72	2551.61	2426.65	2373.09	2319.53
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10-Sep	4195.29	4194.29	4192.27	4189.26	4185.74	4184.23	4182.72
11-Sep	2979.90	3039.40	3158.39	3336.88	3545.12	3634.36	3723.61
12-Sep	2382.35	2400.38	2424.41	2460.46	2496.50	2520.54	2538.56
13-Sep	2361.76	2323.78	2273.14	2197.18	2121.22	2070.58	2069.94
14-Sep	2558.55	2572.48	2600.35	2642.15	2690.92	2652.94	2614.96
15-Sep	2398.31	2419.22	2447.08	2488.88	2530.68	2558.55	2579.45
16-Sep	3693.86	3753.35	3872.35	4050.83	4116.24	4120.96	4123.33
17-Sep	4204.86	4207.22	4211.95	4220.22	4227.31	4226.98	4225.98
18-Sep	4133.96	4137.51	4142.23	4149.32	4156.41	4161.14	4164.68
19-Sep	2364.33	2376.34	2400.38	2436.42	2478.48	2496.50	2514.53
20-Sep	2057.92	2075.94	2099.98	2136.02	2172.07	2196.10	2214.13
21-Sep	2099.98	2111.99	2136.02	2178.08	2214.13	2238.16	2250.18
22-Sep	4143.42	4145.78	4150.50	4157.59	4165.87	4169.41	4172.96
23-Sep	4192.27	4190.77	4189.26	4185.74	4182.72	4180.71	4179.70
24-Sep	4139.87	4142.23	4146.96	4155.23	4162.32	4167.05	4169.41
25-Sep	2515.91	2462.35	2390.94	2283.83	2176.72	2105.31	2146.96
26-Sep	2262.19	2274.21	2298.24	2340.30	2376.34	2400.38	2412.39
27-Sep	2222.50	2184.52	2133.88	2057.92	2093.97	2118.00	2136.02
28-Sep	2551.66	2513.68	2463.04	2387.08	2311.12	2260.48	2222.50
29-Sep	2399.74	2361.76	2311.12	2235.16	2159.20	2108.56	2070.58
30-Sep	4213.90	4212.39	4210.38	4207.36	4204.35	4202.33	4200.83

Table A27. Summer 2002 allocation scenario time series results for the riffle guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	3174.46	3052.53	2930.59	2646.07	2402.20	2239.62	2158.32
2-Jun	4083.39	4035.15	3938.67	3793.96	3625.13	3528.66	3480.42
3-Jun	5192.85	5120.50	5048.14	4879.31	4734.60	4638.12	4589.88
4-Jun	6721.49	6612.04	6393.14	6010.06	5681.72	5554.63	5506.40
5-Jun	6447.86	6338.41	6119.51	5791.17	5530.52	5458.16	5385.80
6-Jun	5530.52	5458.16	5385.80	5216.97	5072.26	4975.78	4927.55
7-Jun	5626.99	5554.63	5458.16	5313.45	5168.73	5072.26	4999.90
8-Jun	5458.16	5409.92	5313.45	5144.61	4999.90	4903.43	4855.19
9-Jun	8623.67	8428.34	8199.06	7870.71	7542.36	7323.46	7159.29
10-Jun	9600.29	9470.08	9209.64	8818.99	8363.23	8199.06	8034.88
11-Jun	10707.14	10576.92	10316.49	9925.84	9470.08	9209.64	9079.43
12-Jun	11618.66	11488.44	11228.01	10837.36	10381.60	10121.16	9990.95
13-Jun	11097.79	10902.47	10642.03	10251.38	9860.73	9600.29	9404.97
14-Jun	6776.21	6612.04	6447.86	6064.79	5736.44	5578.75	5530.52
15-Jun	5144.61	5072.26	4999.90	4831.07	4686.36	4589.88	4541.64
16-Jun	4565.76	4493.41	4396.93	4252.22	4107.51	4011.03	3962.79
17-Jun	8558.56	8363.23	8144.33	7815.98	7487.63	7268.73	7104.56
18-Jun	9795.62	9665.40	9404.97	9014.32	8558.56	8308.51	8199.06
19-Jun	11032.68	10837.36	10642.03	10186.27	9795.62	9535.19	9404.97
20-Jun	11880.74	11684.18	11488.44	11032.68	10642.03	10381.60	10251.38
21-Jun	9600.29	9404.97	9144.53	8753.88	8363.23	8144.33	7980.16
22-Jun	11097.79	10902.47	10642.03	10251.38	9860.73	9600.29	9404.97
23-Jun	12437.28	12328.34	12077.31	11684.18	11228.01	10967.57	10837.36
24-Jun	13524.71	13322.96	12919.44	12546.21	12142.83	11880.74	11749.70
25-Jun	14443.95	14179.69	13827.35	13222.08	12709.62	12491.75	12328.34
26-Jun	14909.61	14758.56	14532.04	13915.44	13322.96	12919.44	12764.09
27-Jun	15010.30	14859.26	14708.21	14091.61	13524.71	13121.20	12919.44
28-Jun	8623.67	8428.34	8199.06	7870.71	7542.36	7323.46	7159.29
29-Jun	8949.21	8818.99	8558.56	8199.06	7815.98	7597.08	7487.63
30-Jun	5578.75	5506.40	5409.92	5265.21	5120.50	5024.02	4951.66
1-Jul	13423.83	13222.08	12818.56	12491.75	12077.31	11815.22	11684.18
2-Jul	11618.66	11488.44	11228.01	10837.36	10381.60	10121.16	9990.95
3-Jul	12142.83	11946.27	11684.18	11293.12	10902.47	10642.03	10446.71
4-Jul	14443.95	14179.69	13827.35	13222.08	12709.62	12491.75	12328.34
5-Jul	15766.39	15591.21	15439.41	15211.70	14909.61	14708.21	14443.95
6-Jul	16842.46	16495.35	16058.35	15708.00	15439.41	15287.60	15161.35
7-Jul	17411.04	17085.54	16923.21	16335.24	15883.17	15649.60	15553.26
8-Jul	18035.92	17953.53	17519.54	16950.13	16495.35	16116.75	15941.57
9-Jul	17879.27	17931.48	18035.92	17411.04	16923.21	16815.55	16495.35
10-Jul	17743.99	17827.05	17931.48	17953.53	17302.54	16950.13	16869.38
11-Jul	17601.21	17687.04	17800.94	17957.59	17736.53	17411.04	17085.54
12-Jul	17428.79	17601.21	17743.99	17905.38	17953.53	17519.54	17302.54
13-Jul	17411.04	17085.54	16923.21	16335.24	15883.17	15649.60	15553.26
14-Jul	14443.95	14179.69	13827.35	13222.08	12709.62	12491.75	12328.34

Table A27, continued. Summer 2002 allocation scenario time series results for the riffle guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	14355.87	14091.61	13726.47	13121.20	12655.15	12437.28	12273.87
16-Jul	16175.14	16058.35	15824.78	15477.36	15249.65	15060.65	14959.96
17-Jul	14355.87	14091.61	13726.47	13121.20	12655.15	12437.28	12273.87
18-Jul	15363.50	15287.60	15111.00	14808.91	14267.78	13915.44	13726.47
19-Jul	16655.45	16175.14	15999.96	15591.21	15363.50	15211.70	15111.00
20-Jul	17628.03	17302.54	16977.04	16655.45	15999.96	15766.39	15649.60
21-Jul	18009.81	18062.03	17628.03	16977.04	16655.45	16175.14	15999.96
22-Jul	17957.59	18009.81	17845.03	17194.04	16842.46	16335.24	16116.75
23-Jul	17905.38	17957.59	18062.03	17302.54	16896.29	16655.45	16335.24
24-Jul	17879.27	17931.48	18035.92	17411.04	16923.21	16815.55	16495.35
25-Jul	17931.48	17983.70	17953.53	17302.54	16869.38	16495.35	16175.14
26-Jul	17879.27	17931.48	18035.92	17411.04	16923.21	16815.55	16495.35
27-Jul	16923.21	16869.38	16495.35	15941.57	15553.26	15439.41	15325.55
28-Jul	15211.70	15111.00	14909.61	14532.04	14003.52	13625.59	13322.96
29-Jul	12273.87	12142.83	11880.74	11488.44	11032.68	10837.36	10642.03
30-Jul	11618.66	11488.44	11228.01	10837.36	10381.60	10121.16	9990.95
31-Jul	14443.95	14267.78	13915.44	13322.96	12709.62	12546.21	12382.81
1-Aug	15591.21	15477.36	15325.55	15060.65	14758.56	14443.95	14179.69
2-Aug	17983.70	18035.92	17736.53	17085.54	16815.55	16335.24	16058.35
3-Aug	17601.21	17687.04	17800.94	17957.59	17736.53	17411.04	17085.54
4-Aug	17345.54	17342.57	17601.21	17827.05	17983.70	17953.53	17736.53
5-Aug	17601.21	17687.04	17800.94	17957.59	17736.53	17411.04	17085.54
6-Aug	17411.04	17085.54	16923.21	16335.24	15883.17	15649.60	15553.26
7-Aug	17953.53	17628.03	17194.04	16869.38	16175.14	15941.57	15766.39
8-Aug	17300.95	17342.57	17658.56	17853.16	18009.81	17845.03	17628.03
9-Aug	17434.66	17595.22	17657.67	17345.54	17601.21	17743.99	17800.94
10-Aug	17167.06	17327.62	17541.70	17568.49	17300.95	17515.00	17687.04
11-Aug	16791.25	16979.15	17274.10	17595.22	17479.31	17345.54	17342.57
12-Aug	16603.34	16791.25	17167.06	17488.18	17568.49	17390.13	17300.95
13-Aug	17845.03	17519.54	17085.54	16842.46	16116.75	15883.17	15708.00
14-Aug	17658.56	17743.99	17853.16	18009.81	17628.03	17194.04	16950.13
15-Aug	17434.72	17300.95	17428.79	17772.46	17931.48	18035.92	17953.53
16-Aug	18009.81	18062.03	17628.03	16977.04	16655.45	16175.14	15999.96
17-Aug	17390.13	17256.36	17515.00	17800.94	17957.59	18062.03	17845.03
18-Aug	17613.08	17479.31	17300.95	17658.56	17827.05	17931.48	18009.81
19-Aug	17595.22	17702.26	17523.90	17256.36	17715.51	17827.05	17879.27
20-Aug	17488.18	17595.22	17613.08	17300.95	17658.56	17772.46	17827.05
21-Aug	17434.66	17595.22	17657.67	17345.54	17601.21	17743.99	17800.94
22-Aug	17381.14	17541.70	17702.26	17390.13	17515.00	17715.51	17772.46
23-Aug	17327.62	17488.18	17648.74	17434.72	17428.79	17687.04	17743.99
24-Aug	17381.14	17541.70	17702.26	17390.13	17515.00	17715.51	17772.46
25-Aug	17488.18	17595.22	17613.08	17300.95	17658.56	17772.46	17827.05
26-Aug	17488.18	17595.22	17613.08	17300.95	17658.56	17772.46	17827.05
27-Aug	17488.18	17595.22	17613.08	17300.95	17658.56	17772.46	17827.05

Table A27, continued. Summer 2002 allocation scenario time series results for the riffle guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	17657.67	17568.49	17390.13	17515.00	17800.94	17879.27	17957.59
29-Aug	17879.27	17931.48	18035.92	17411.04	16923.21	16815.55	16495.35
30-Aug	17601.21	17687.04	17800.94	17957.59	17736.53	17411.04	17085.54
31-Aug	17523.90	17390.13	17342.57	17715.51	17879.27	17983.70	18062.03
1-Sep	17648.74	17657.67	17479.31	17342.57	17743.99	17827.05	17905.38
2-Sep	17220.58	17381.14	17595.22	17523.90	17256.36	17601.21	17715.51
3-Sep	16885.20	17073.11	17327.62	17648.74	17434.72	17300.95	17428.79
4-Sep	16791.25	16979.15	17274.10	17595.22	17479.31	17345.54	17342.57
5-Sep	16415.44	16603.34	16979.15	17434.66	17657.67	17479.31	17390.13
6-Sep	16085.62	16227.53	16603.34	17167.06	17488.18	17702.26	17568.49
7-Sep	16603.34	16791.25	17167.06	17488.18	17568.49	17390.13	17300.95
8-Sep	17073.11	17274.10	17488.18	17613.08	17345.54	17428.79	17658.56
9-Sep	16979.15	17167.06	17381.14	17702.26	17390.13	17256.36	17515.00
10-Sep	16791.25	16979.15	17274.10	17595.22	17479.31	17345.54	17342.57
11-Sep	16509.39	16697.29	17073.11	17488.18	17613.08	17434.72	17345.54
12-Sep	16227.53	16509.39	16791.25	17327.62	17648.74	17568.49	17479.31
13-Sep	16085.62	16227.53	16603.34	17167.06	17488.18	17702.26	17568.49
14-Sep	16180.23	16415.44	16697.29	17274.10	17595.22	17613.08	17523.90
15-Sep	16509.39	16697.29	17073.11	17488.18	17613.08	17434.72	17345.54
16-Sep	16979.15	17167.06	17381.14	17702.26	17390.13	17256.36	17515.00
17-Sep	16885.20	17073.11	17327.62	17648.74	17434.72	17300.95	17428.79
18-Sep	16415.44	16603.34	16979.15	17434.66	17657.67	17479.31	17390.13
19-Sep	16509.39	16697.29	17073.11	17488.18	17613.08	17434.72	17345.54
20-Sep	16509.39	16697.29	17073.11	17488.18	17613.08	17434.72	17345.54
21-Sep	17601.21	17687.04	17800.94	17957.59	17736.53	17411.04	17085.54
22-Sep	17827.05	17905.38	17983.70	17628.03	16977.04	16869.38	16815.55
23-Sep	17715.51	17800.94	17905.38	18062.03	17411.04	16977.04	16896.29
24-Sep	17601.21	17687.04	17800.94	17957.59	17736.53	17411.04	17085.54
25-Sep	16175.14	16058.35	15824.78	15477.36	15249.65	15060.65	14959.96
26-Sep	13524.71	13322.96	12919.44	12546.21	12142.83	11880.74	11749.70
27-Sep	8493.45	8308.51	8089.61	7761.26	7432.91	7214.01	7049.84
28-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29-Sep	1285.68	1263.78	1234.57	1190.77	1146.97	1117.77	1095.86
30-Sep	5024.02	4975.78	4879.31	4734.60	4565.76	4493.41	4421.05

Table A28. Summer 2002 allocation scenario time series results for the fast generalist guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	4466.58	4242.22	4017.87	3494.37	3045.67	2746.53	2596.96
2-Jun	5570.83	5513.64	5399.25	5227.67	5027.50	4913.11	4855.92
3-Jun	6886.27	6800.48	6714.69	6514.51	6342.93	6228.55	6171.35
4-Jun	8263.95	8177.66	8005.07	7703.03	7444.15	7315.21	7258.02
5-Jun	8048.21	7961.92	7789.33	7530.44	7286.61	7200.83	7115.04
6-Jun	7286.61	7200.83	7115.04	6914.86	6743.28	6628.90	6571.70
7-Jun	7401.00	7315.21	7200.83	7029.25	6857.67	6743.28	6657.49
8-Jun	7200.83	7143.63	7029.25	6829.07	6657.49	6543.11	6485.92
9-Jun	9747.87	9605.75	9428.94	9170.05	8911.17	8738.58	8609.13
10-Jun	10458.45	10363.71	10174.22	9889.99	9558.38	9428.94	9299.49
11-Jun	11263.78	11169.04	10979.55	10695.31	10363.71	10174.22	10079.47
12-Jun	11926.99	11832.25	11642.76	11358.52	11026.92	10837.43	10742.69
13-Jun	11548.01	11405.90	11216.41	10932.17	10647.94	10458.45	10316.33
14-Jun	8307.10	8177.66	8048.21	7746.18	7487.30	7343.81	7286.61
15-Jun	6829.07	6743.28	6657.49	6457.32	6285.74	6171.35	6114.16
16-Jun	6142.76	6056.97	5942.58	5771.01	5599.43	5485.04	5427.85
17-Jun	9700.50	9558.38	9385.79	9126.90	8868.02	8695.43	8565.99
18-Jun	10600.57	10505.82	10316.33	10032.10	9700.50	9515.23	9428.94
19-Jun	11500.64	11358.52	11216.41	10884.80	10600.57	10411.08	10316.33
20-Jun	12329.60	12027.64	11832.25	11500.64	11216.41	11026.92	10932.17
21-Jun	10458.45	10316.33	10126.85	9842.61	9558.38	9385.79	9256.35
22-Jun	11548.01	11405.90	11216.41	10932.17	10647.94	10458.45	10316.33
23-Jun	13159.45	13008.82	12631.55	12027.64	11642.76	11453.27	11358.52
24-Jun	14140.57	14010.87	13751.48	13310.07	12732.21	12329.60	12128.29
25-Jun	14512.11	14436.25	14335.11	13946.02	13536.01	13234.76	13008.82
26-Jun	14888.52	14663.10	14537.39	14360.40	14010.87	13751.48	13611.32
27-Jun	15038.81	14813.38	14587.96	14410.96	14140.57	13881.17	13751.48
28-Jun	9747.87	9605.75	9428.94	9170.05	8911.17	8738.58	8609.13
29-Jun	9984.73	9889.99	9700.50	9428.94	9126.90	8954.31	8868.02
30-Jun	7343.81	7258.02	7143.63	6972.05	6800.48	6686.09	6600.30
1-Jul	14075.72	13946.02	13686.63	13234.76	12631.55	12228.95	12027.64
2-Jul	11926.99	11832.25	11642.76	11358.52	11026.92	10837.43	10742.69
3-Jul	12732.21	12430.25	12027.64	11690.13	11405.90	11216.41	11074.29
4-Jul	14512.11	14436.25	14335.11	13946.02	13536.01	13234.76	13008.82
5-Jul	15377.30	15208.45	15260.82	15339.37	14888.52	14587.96	14512.11
6-Jul	16146.06	15968.96	15658.71	15321.01	15260.82	15313.19	15264.23
7-Jul	16555.30	16171.11	16084.25	15870.12	15489.86	15264.73	15221.54
8-Jul	17341.33	17195.63	16683.37	16063.65	15968.96	15714.99	15546.14
9-Jul	17447.18	17411.89	17341.33	16555.30	16084.25	16166.66	15968.96
10-Jul	17549.47	17482.46	17411.89	17195.63	16427.24	16063.65	16125.46
11-Jul	17564.72	17598.84	17500.10	17394.25	16939.50	16555.30	16171.11
12-Jul	17280.13	17564.72	17549.47	17429.54	17195.63	16683.37	16427.24
13-Jul	16555.30	16171.11	16084.25	15870.12	15489.86	15264.73	15221.54
14-Jul	14512.11	14436.25	14335.11	13946.02	13536.01	13234.76	13008.82

Table A28, continued. Summer 2002 allocation scenario time series results for the fast generalist guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	14486.82	14410.96	14270.26	13881.17	13460.69	13159.45	12933.51
16-Jul	15771.27	15658.71	15433.58	15247.73	15326.28	15113.95	14963.67
17-Jul	14486.82	14410.96	14270.26	13881.17	13460.69	13159.45	12933.51
18-Jul	15287.00	15313.19	15189.09	14738.24	14461.54	14360.40	14270.26
19-Jul	16067.81	15771.27	15602.42	15208.45	15287.00	15339.37	15189.09
20-Jul	16811.43	16427.24	16043.05	16067.81	15602.42	15377.30	15264.73
21-Jul	17358.97	17323.69	16811.43	16043.05	16067.81	15771.27	15602.42
22-Jul	17394.25	17358.97	17067.56	16299.18	16146.06	15870.12	15714.99
23-Jul	17429.54	17394.25	17323.69	16427.24	16104.86	16067.81	15870.12
24-Jul	17447.18	17411.89	17341.33	16555.30	16084.25	16166.66	15968.96
25-Jul	17411.89	17376.61	17195.63	16427.24	16125.46	15968.96	15771.27
26-Jul	17447.18	17411.89	17341.33	16555.30	16084.25	16166.66	15968.96
27-Jul	16084.25	16125.46	15968.96	15546.14	15221.54	15260.82	15300.09
28-Jul	15339.37	15189.09	14888.52	14537.39	14385.68	14205.41	14010.87
29-Jul	12933.51	12732.21	12329.60	11832.25	11500.64	11358.52	11216.41
30-Jul	11926.99	11832.25	11642.76	11358.52	11026.92	10837.43	10742.69
31-Jul	14512.11	14461.54	14360.40	14010.87	13536.01	13310.07	13084.13
1-Aug	15208.45	15247.73	15300.09	15113.95	14663.10	14512.11	14436.25
2-Aug	17376.61	17341.33	16939.50	16171.11	16166.66	15870.12	15658.71
3-Aug	17564.72	17598.84	17500.10	17394.25	16939.50	16555.30	16171.11
4-Aug	17024.74	17137.83	17564.72	17482.46	17376.61	17195.63	16939.50
5-Aug	17564.72	17598.84	17500.10	17394.25	16939.50	16555.30	16171.11
6-Aug	16555.30	16171.11	16084.25	15870.12	15489.86	15264.73	15221.54
7-Aug	17195.63	16811.43	16299.18	16125.46	15771.27	15546.14	15377.30
8-Aug	17010.13	17137.83	17623.53	17464.82	17358.97	17067.56	16811.43
9-Aug	17211.14	17169.40	17126.97	17024.74	17564.72	17549.47	17500.10
10-Aug	17280.71	17238.97	17183.31	17097.76	17010.13	17422.42	17598.84
11-Aug	16750.89	17015.80	17252.88	17169.40	17068.55	17024.74	17137.83
12-Aug	16485.98	16750.89	17280.71	17197.23	17097.76	17039.34	17010.13
13-Aug	17067.56	16683.37	16171.11	16146.06	15714.99	15489.86	15321.01
14-Aug	17623.53	17549.47	17464.82	17358.97	16811.43	16299.18	16063.65
15-Aug	17053.95	17010.13	17280.13	17524.79	17411.89	17341.33	17195.63
16-Aug	17358.97	17323.69	16811.43	16043.05	16067.81	15771.27	15602.42
17-Aug	17039.34	16995.53	17422.42	17500.10	17394.25	17323.69	17067.56
18-Aug	17112.36	17068.55	17010.13	17623.53	17482.46	17411.89	17358.97
19-Aug	17169.40	17141.57	17083.15	16995.53	17574.16	17482.46	17447.18
20-Aug	17197.23	17169.40	17112.36	17010.13	17623.53	17524.79	17482.46
21-Aug	17211.14	17169.40	17126.97	17024.74	17564.72	17549.47	17500.10
22-Aug	17225.05	17183.31	17141.57	17039.34	17422.42	17574.16	17524.79
23-Aug	17238.97	17197.23	17155.48	17053.95	17280.13	17598.84	17549.47
24-Aug	17225.05	17183.31	17141.57	17039.34	17422.42	17574.16	17524.79
25-Aug	17197.23	17169.40	17112.36	17010.13	17623.53	17524.79	17482.46
26-Aug	17197.23	17169.40	17112.36	17010.13	17623.53	17524.79	17482.46
27-Aug	17197.23	17169.40	17112.36	17010.13	17623.53	17524.79	17482.46

Table A28, continued. Summer 2002 allocation scenario time series results for the fast generalist guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	17126.97	17097.76	17039.34	17422.42	17500.10	17447.18	17394.25
29-Aug	17447.18	17411.89	17341.33	16555.30	16084.25	16166.66	15968.96
30-Aug	17564.72	17598.84	17500.10	17394.25	16939.50	16555.30	16171.11
31-Aug	17083.15	17039.34	17137.83	17574.16	17447.18	17376.61	17323.69
1-Sep	17155.48	17126.97	17068.55	17137.83	17549.47	17482.46	17429.54
2-Sep	17266.80	17225.05	17169.40	17083.15	16995.53	17564.72	17574.16
3-Sep	16883.35	17148.26	17238.97	17155.48	17053.95	17010.13	17280.13
4-Sep	16750.89	17015.80	17252.88	17169.40	17068.55	17024.74	17137.83
5-Sep	16221.07	16485.98	17015.80	17211.14	17126.97	17068.55	17039.34
6-Sep	15656.68	15956.16	16485.98	17280.71	17197.23	17141.57	17097.76
7-Sep	16485.98	16750.89	17280.71	17197.23	17097.76	17039.34	17010.13
8-Sep	17148.26	17252.88	17197.23	17112.36	17024.74	17280.13	17623.53
9-Sep	17015.80	17280.71	17225.05	17141.57	17039.34	16995.53	17422.42
10-Sep	16750.89	17015.80	17252.88	17169.40	17068.55	17024.74	17137.83
11-Sep	16353.53	16618.44	17148.26	17197.23	17112.36	17053.95	17024.74
12-Sep	15956.16	16353.53	16750.89	17238.97	17155.48	17097.76	17068.55
13-Sep	15656.68	15956.16	16485.98	17280.71	17197.23	17141.57	17097.76
14-Sep	15856.33	16221.07	16618.44	17252.88	17169.40	17112.36	17083.15
15-Sep	16353.53	16618.44	17148.26	17197.23	17112.36	17053.95	17024.74
16-Sep	17015.80	17280.71	17225.05	17141.57	17039.34	16995.53	17422.42
17-Sep	16883.35	17148.26	17238.97	17155.48	17053.95	17010.13	17280.13
18-Sep	16221.07	16485.98	17015.80	17211.14	17126.97	17068.55	17039.34
19-Sep	16353.53	16618.44	17148.26	17197.23	17112.36	17053.95	17024.74
20-Sep	16353.53	16618.44	17148.26	17197.23	17112.36	17053.95	17024.74
21-Sep	17564.72	17598.84	17500.10	17394.25	16939.50	16555.30	16171.11
22-Sep	17482.46	17429.54	17376.61	16811.43	16043.05	16125.46	16166.66
23-Sep	17574.16	17500.10	17429.54	17323.69	16555.30	16043.05	16104.86
24-Sep	17564.72	17598.84	17500.10	17394.25	16939.50	16555.30	16171.11
25-Sep	15771.27	15658.71	15433.58	15247.73	15326.28	15113.95	14963.67
26-Sep	14140.57	14010.87	13751.48	13310.07	12732.21	12329.60	12128.29
27-Sep	9653.12	9515.23	9342.64	9083.76	8824.87	8652.28	8522.84
28-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29-Sep	1293.51	1277.16	1255.36	1222.66	1189.97	1168.17	1151.82
30-Sep	6686.09	6628.90	6514.51	6342.93	6142.76	6056.97	5971.18

Table A29. Summer 2002 allocation scenario time series results for the pool – run guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	5004.87	4838.11	4671.34	4282.22	3948.69	3726.34	3615.16
2-Jun	6049.63	5994.67	5884.76	5719.90	5527.57	5417.66	5362.71
3-Jun	7313.56	7231.13	7148.70	6956.36	6791.50	6681.59	6626.64
4-Jun	8251.60	8207.25	8118.56	7963.35	7830.31	7725.71	7670.76
5-Jun	8140.73	8096.39	8007.70	7874.66	7698.23	7615.80	7533.37
6-Jun	7698.23	7615.80	7533.37	7341.03	7176.17	7066.27	7011.31
7-Jun	7808.14	7725.71	7615.80	7450.94	7286.08	7176.17	7093.74
8-Jun	7615.80	7560.85	7450.94	7258.60	7093.74	6983.84	6928.88
9-Jun	9101.47	8962.95	8850.26	8717.23	8584.19	8495.50	8428.98
10-Jun	9794.04	9701.69	9517.01	9239.98	8916.78	8850.26	8783.74
11-Jun	10578.95	10486.61	10301.92	10024.89	9701.69	9517.01	9424.67
12-Jun	11225.35	11133.01	10948.32	10671.29	10348.09	10163.41	10071.06
13-Jun	10855.98	10717.46	10532.78	10255.75	9978.72	9794.04	9655.52
14-Jun	8273.77	8207.25	8140.73	7985.52	7852.49	7753.19	7698.23
15-Jun	7258.60	7176.17	7093.74	6901.41	6736.55	6626.64	6571.68
16-Jun	6599.16	6516.73	6406.82	6241.96	6077.10	5967.19	5912.24
17-Jun	9055.30	8916.78	8828.09	8695.05	8562.02	8473.32	8406.81
18-Jun	9932.55	9840.21	9655.52	9378.49	9055.30	8894.61	8850.26
19-Jun	10809.81	10671.29	10532.78	10209.58	9932.55	9747.87	9655.52
20-Jun	11311.11	11246.79	11133.01	10809.81	10532.78	10348.09	10255.75
21-Jun	9794.04	9655.52	9470.84	9193.81	8916.78	8828.09	8761.57
22-Jun	10855.98	10717.46	10532.78	10255.75	9978.72	9794.04	9655.52
23-Jun	11608.64	11496.04	11375.42	11246.79	10948.32	10763.64	10671.29
24-Jun	12190.67	12136.97	12029.58	11721.24	11396.86	11311.11	11268.23
25-Jun	12444.69	12370.35	12271.22	12110.13	11890.13	11664.94	11496.04
26-Jun	12664.39	12555.38	12469.48	12296.00	12136.97	12029.58	11946.43
27-Jun	12737.06	12628.05	12519.04	12345.57	12190.67	12083.28	12029.58
28-Jun	9101.47	8962.95	8850.26	8717.23	8584.19	8495.50	8428.98
29-Jun	9332.32	9239.98	9055.30	8850.26	8695.05	8606.36	8562.02
30-Jun	7753.19	7670.76	7560.85	7395.99	7231.13	7121.22	7038.79
1-Jul	12163.82	12110.13	12002.73	11664.94	11375.42	11289.67	11246.79
2-Jul	11225.35	11133.01	10948.32	10671.29	10348.09	10163.41	10071.06
3-Jul	11396.86	11332.54	11246.79	10994.49	10717.46	10532.78	10394.26
4-Jul	12444.69	12370.35	12271.22	12110.13	11890.13	11664.94	11496.04
5-Jul	12931.83	12750.82	12803.46	12882.41	12664.39	12519.04	12444.69
6-Jul	13578.37	13463.73	13233.51	12871.49	12803.46	12856.09	12846.07
7-Jul	13770.74	13645.54	13593.63	13408.96	13052.50	12811.16	12763.98
8-Jul	14069.89	13979.42	13812.48	13598.71	13463.73	13293.84	13112.84
9-Jul	14362.27	14264.81	14069.89	13770.74	13593.63	13573.28	13463.73
10-Jul	14603.59	14459.73	14264.81	13979.42	13729.01	13598.71	13583.45
11-Jul	14738.44	14698.73	14508.46	14216.08	13895.95	13770.74	13645.54
12-Jul	14611.87	14738.44	14603.59	14313.54	13979.42	13812.48	13729.01
13-Jul	13770.74	13645.54	13593.63	13408.96	13052.50	12811.16	12763.98
14-Jul	12444.69	12370.35	12271.22	12110.13	11890.13	11664.94	11496.04

Table A29, continued. Summer 2002 allocation scenario time series results for the pool – run guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	12419.91	12345.57	12244.37	12083.28	11833.83	11608.64	11439.74
16-Jul	13354.18	13233.51	12992.16	12790.30	12869.25	12773.40	12700.72
17-Jul	12419.91	12345.57	12244.37	12083.28	11833.83	11608.64	11439.74
18-Jul	12829.77	12856.09	12809.74	12591.71	12395.13	12296.00	12244.37
19-Jul	13518.50	13354.18	13173.17	12750.82	12829.77	12882.41	12809.74
20-Jul	13854.22	13729.01	13603.80	13518.50	13173.17	12931.83	12811.16
21-Jul	14118.62	14021.16	13854.22	13603.80	13518.50	13354.18	13173.17
22-Jul	14216.08	14118.62	13937.69	13687.27	13578.37	13408.96	13293.84
23-Jul	14313.54	14216.08	14021.16	13729.01	13588.54	13518.50	13408.96
24-Jul	14362.27	14264.81	14069.89	13770.74	13593.63	13573.28	13463.73
25-Jul	14264.81	14167.35	13979.42	13729.01	13583.45	13463.73	13354.18
26-Jul	14362.27	14264.81	14069.89	13770.74	13593.63	13573.28	13463.73
27-Jul	13593.63	13583.45	13463.73	13112.84	12763.98	12803.46	12842.93
28-Jul	12882.41	12809.74	12664.39	12469.48	12320.78	12217.52	12136.97
29-Jul	11439.74	11396.86	11311.11	11133.01	10809.81	10671.29	10532.78
30-Jul	11225.35	11133.01	10948.32	10671.29	10348.09	10163.41	10071.06
31-Jul	12444.69	12395.13	12296.00	12136.97	11890.13	11721.24	11552.34
1-Aug	12750.82	12790.30	12842.93	12773.40	12555.38	12444.69	12370.35
2-Aug	14167.35	14069.89	13895.95	13645.54	13573.28	13408.96	13233.51
3-Aug	14738.44	14698.73	14508.46	14216.08	13895.95	13770.74	13645.54
4-Aug	14461.66	14548.59	14738.44	14459.73	14167.35	13979.42	13895.95
5-Aug	14738.44	14698.73	14508.46	14216.08	13895.95	13770.74	13645.54
6-Aug	13770.74	13645.54	13593.63	13408.96	13052.50	12811.16	12763.98
7-Aug	13979.42	13854.22	13687.27	13583.45	13354.18	13112.84	12931.83
8-Aug	14473.49	14548.59	14746.30	14411.00	14118.62	13937.69	13854.22
9-Aug	14178.29	14291.56	14378.89	14461.66	14738.44	14603.59	14508.46
10-Aug	13989.52	14102.79	14253.80	14402.54	14473.49	14675.16	14698.73
11-Aug	13954.08	13971.80	14065.03	14291.56	14426.19	14461.66	14548.59
12-Aug	13936.37	13954.08	13989.52	14216.05	14402.54	14449.84	14473.49
13-Aug	13937.69	13812.48	13645.54	13578.37	13293.84	13052.50	12871.49
14-Aug	14746.30	14603.59	14411.00	14118.62	13854.22	13687.27	13598.71
15-Aug	14438.01	14473.49	14611.87	14556.03	14264.81	14069.89	13979.42
16-Aug	14118.62	14021.16	13854.22	13603.80	13518.50	13354.18	13173.17
17-Aug	14449.84	14485.31	14675.16	14508.46	14216.08	14021.16	13937.69
18-Aug	14390.72	14426.19	14473.49	14746.30	14459.73	14264.81	14118.62
19-Aug	14291.56	14367.07	14414.37	14485.31	14651.16	14459.73	14362.27
20-Aug	14216.05	14291.56	14390.72	14473.49	14746.30	14556.03	14459.73
21-Aug	14178.29	14291.56	14378.89	14461.66	14738.44	14603.59	14508.46
22-Aug	14140.54	14253.80	14367.07	14449.84	14675.16	14651.16	14556.03
23-Aug	14102.79	14216.05	14329.32	14438.01	14611.87	14698.73	14603.59
24-Aug	14140.54	14253.80	14367.07	14449.84	14675.16	14651.16	14556.03
25-Aug	14216.05	14291.56	14390.72	14473.49	14746.30	14556.03	14459.73
26-Aug	14216.05	14291.56	14390.72	14473.49	14746.30	14556.03	14459.73
27-Aug	14216.05	14291.56	14390.72	14473.49	14746.30	14556.03	14459.73

Table A29, continued. Summer 2002 allocation scenario time series results for the pool – run guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	14378.89	14402.54	14449.84	14675.16	14508.46	14362.27	14216.08
29-Aug	14362.27	14264.81	14069.89	13770.74	13593.63	13573.28	13463.73
30-Aug	14738.44	14698.73	14508.46	14216.08	13895.95	13770.74	13645.54
31-Aug	14414.37	14449.84	14548.59	14651.16	14362.27	14167.35	14021.16
1-Sep	14329.32	14378.89	14426.19	14548.59	14603.59	14459.73	14313.54
2-Sep	14027.27	14140.54	14291.56	14414.37	14485.31	14738.44	14651.16
3-Sep	13962.94	13980.66	14102.79	14329.32	14438.01	14473.49	14611.87
4-Sep	13954.08	13971.80	14065.03	14291.56	14426.19	14461.66	14548.59
5-Sep	13918.65	13936.37	13971.80	14178.29	14378.89	14426.19	14449.84
6-Sep	13658.43	13900.93	13936.37	13989.52	14216.05	14367.07	14402.54
7-Sep	13936.37	13954.08	13989.52	14216.05	14402.54	14449.84	14473.49
8-Sep	13980.66	14065.03	14216.05	14390.72	14461.66	14611.87	14746.30
9-Sep	13971.80	13989.52	14140.54	14367.07	14449.84	14485.31	14675.16
10-Sep	13954.08	13971.80	14065.03	14291.56	14426.19	14461.66	14548.59
11-Sep	13927.51	13945.22	13980.66	14216.05	14390.72	14438.01	14461.66
12-Sep	13900.93	13927.51	13954.08	14102.79	14329.32	14402.54	14426.19
13-Sep	13658.43	13900.93	13936.37	13989.52	14216.05	14367.07	14402.54
14-Sep	13820.10	13918.65	13945.22	14065.03	14291.56	14390.72	14414.37
15-Sep	13927.51	13945.22	13980.66	14216.05	14390.72	14438.01	14461.66
16-Sep	13971.80	13989.52	14140.54	14367.07	14449.84	14485.31	14675.16
17-Sep	13962.94	13980.66	14102.79	14329.32	14438.01	14473.49	14611.87
18-Sep	13918.65	13936.37	13971.80	14178.29	14378.89	14426.19	14449.84
19-Sep	13927.51	13945.22	13980.66	14216.05	14390.72	14438.01	14461.66
20-Sep	13927.51	13945.22	13980.66	14216.05	14390.72	14438.01	14461.66
21-Sep	14738.44	14698.73	14508.46	14216.08	13895.95	13770.74	13645.54
22-Sep	14459.73	14313.54	14167.35	13854.22	13603.80	13583.45	13573.28
23-Sep	14651.16	14508.46	14313.54	14021.16	13770.74	13603.80	13588.54
24-Sep	14738.44	14698.73	14508.46	14216.08	13895.95	13770.74	13645.54
25-Sep	13354.18	13233.51	12992.16	12790.30	12869.25	12773.40	12700.72
26-Sep	12190.67	12136.97	12029.58	11721.24	11396.86	11311.11	11268.23
27-Sep	9009.12	8894.61	8805.92	8672.88	8539.84	8451.15	8384.63
28-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29-Sep	2755.03	2722.69	2679.57	2614.90	2550.22	2507.10	2474.77
30-Sep	7121.22	7066.27	6956.36	6791.50	6599.16	6516.73	6434.30

Table A30. Summer 2002 allocation scenario time series results for the pool – cover guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	4117.49	3789.69	3461.89	2697.02	2041.42	1604.36	1385.82
2-Jun	3970.31	3984.55	4013.05	4055.79	4105.66	4134.15	4148.40
3-Jun	3642.62	3663.99	3685.36	3735.23	3777.97	3806.46	3820.71
4-Jun	3612.61	3602.79	3583.14	3548.77	3519.30	3535.76	3550.01
5-Jun	3588.06	3578.23	3558.59	3529.12	3542.89	3564.26	3585.63
6-Jun	3542.89	3564.26	3585.63	3635.49	3678.24	3706.73	3720.98
7-Jun	3514.39	3535.76	3564.26	3607.00	3649.74	3678.24	3699.61
8-Jun	3564.26	3578.50	3607.00	3656.86	3699.61	3728.10	3742.35
9-Jun	3694.83	3743.66	3745.21	3715.74	3686.28	3666.63	3651.90
10-Jun	3450.65	3483.20	3548.32	3645.99	3759.94	3745.21	3730.47
11-Jun	3173.91	3206.47	3271.58	3369.25	3483.20	3548.32	3580.88
12-Jun	2946.01	2978.57	3043.68	3141.35	3255.30	3320.42	3352.98
13-Jun	3076.24	3125.08	3190.19	3287.86	3385.53	3450.65	3499.48
14-Jun	3617.52	3602.79	3588.06	3553.68	3524.21	3528.64	3542.89
15-Jun	3656.86	3678.24	3699.61	3749.47	3792.21	3820.71	3834.96
16-Jun	3827.83	3849.20	3877.70	3920.44	3963.18	3991.68	4005.93
17-Jun	3711.10	3759.94	3740.30	3710.83	3681.36	3661.72	3646.99
18-Jun	3401.81	3434.37	3499.48	3597.15	3711.10	3755.03	3745.21
19-Jun	3092.52	3141.35	3190.19	3304.14	3401.81	3466.93	3499.48
20-Jun	2937.00	2943.76	2978.57	3092.52	3190.19	3255.30	3287.86
21-Jun	3450.65	3499.48	3564.60	3662.27	3759.94	3740.30	3725.56
22-Jun	3076.24	3125.08	3190.19	3287.86	3385.53	3450.65	3499.48
23-Jun	2961.24	2936.07	2930.24	2943.76	3043.68	3108.80	3141.35
24-Jun	3133.35	3109.35	3061.36	2986.42	2927.99	2937.00	2941.50
25-Jun	3189.79	3181.03	3169.34	3097.35	3024.18	2973.83	2936.07
26-Jun	3138.58	3183.56	3192.72	3172.26	3109.35	3061.36	3036.77
27-Jun	3108.58	3153.57	3198.56	3178.11	3133.35	3085.35	3061.36
28-Jun	3694.83	3743.66	3745.21	3715.74	3686.28	3666.63	3651.90
29-Jun	3613.43	3645.99	3711.10	3745.21	3710.83	3691.19	3681.36
30-Jun	3528.64	3550.01	3578.50	3621.25	3663.99	3692.48	3713.85
1-Jul	3121.35	3097.35	3049.36	2973.83	2930.24	2939.25	2943.76
2-Jul	2946.01	2978.57	3043.68	3141.35	3255.30	3320.42	3352.98
3-Jul	2927.99	2934.75	2943.76	3027.40	3125.08	3190.19	3239.03
4-Jul	3189.79	3181.03	3169.34	3097.35	3024.18	2973.83	2936.07
5-Jul	2801.69	2911.17	2966.14	3048.60	3138.58	3198.56	3189.79
6-Jul	2569.90	2561.72	2619.23	2838.19	2966.14	3021.11	3063.60
7-Jul	2497.99	2524.57	2548.02	2553.99	2728.71	2874.68	2924.91
8-Jul	2458.09	2453.69	2489.13	2540.72	2561.72	2582.74	2692.22
9-Jul	2537.65	2511.13	2458.09	2497.99	2548.02	2577.19	2561.72
10-Jul	2555.62	2564.17	2511.13	2453.69	2506.85	2540.72	2562.60
11-Jul	2608.25	2533.80	2577.43	2497.87	2471.41	2497.99	2524.57
12-Jul	2971.47	2608.25	2555.62	2524.39	2453.69	2489.13	2506.85
13-Jul	2497.99	2524.57	2548.02	2553.99	2728.71	2874.68	2924.91
14-Jul	3189.79	3181.03	3169.34	3097.35	3024.18	2973.83	2936.07

Table A30, continued. Summer 2002 allocation scenario time series results for the pool – cover guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	3186.87	3178.11	3157.34	3085.35	3011.60	2961.24	2923.48
16-Jul	2546.25	2619.23	2765.20	2952.40	3034.86	3093.59	3123.58
17-Jul	3186.87	3178.11	3157.34	3085.35	3011.60	2961.24	2923.48
18-Jul	2993.63	3021.11	3078.59	3168.57	3183.95	3172.26	3157.34
19-Jul	2569.46	2546.25	2655.73	2911.17	2993.63	3048.60	3078.59
20-Jul	2480.27	2506.85	2533.43	2569.46	2655.73	2801.69	2874.68
21-Jul	2471.35	2444.83	2480.27	2533.43	2569.46	2546.25	2655.73
22-Jul	2497.87	2471.35	2462.55	2515.71	2569.90	2553.99	2582.74
23-Jul	2524.39	2497.87	2444.83	2506.85	2555.31	2569.46	2553.99
24-Jul	2537.65	2511.13	2458.09	2497.99	2548.02	2577.19	2561.72
25-Jul	2511.13	2484.61	2453.69	2506.85	2562.60	2561.72	2546.25
26-Jul	2537.65	2511.13	2458.09	2497.99	2548.02	2577.19	2561.72
27-Jul	2548.02	2562.60	2561.72	2692.22	2924.91	2966.14	3007.37
28-Jul	3048.60	3078.59	3138.58	3192.72	3175.18	3145.34	3109.35
29-Jul	2923.48	2927.99	2937.00	2978.57	3092.52	3141.35	3190.19
30-Jul	2946.01	2978.57	3043.68	3141.35	3255.30	3320.42	3352.98
31-Jul	3189.79	3183.95	3172.26	3109.35	3024.18	2986.42	2948.66
1-Aug	2911.17	2952.40	3007.37	3093.59	3183.56	3189.79	3181.03
2-Aug	2484.61	2458.09	2471.41	2524.57	2577.19	2553.99	2619.23
3-Aug	2608.25	2533.80	2577.43	2497.87	2471.41	2497.99	2524.57
4-Aug	3322.04	3153.09	2608.25	2564.17	2484.61	2453.69	2471.41
5-Aug	2608.25	2533.80	2577.43	2497.87	2471.41	2497.99	2524.57
6-Aug	2497.99	2524.57	2548.02	2553.99	2728.71	2874.68	2924.91
7-Aug	2453.69	2480.27	2515.71	2562.60	2546.25	2692.22	2801.69
8-Aug	3328.37	3153.09	2522.89	2550.91	2471.35	2462.55	2480.27
9-Aug	3124.98	3212.83	3277.72	3322.04	2608.25	2555.62	2577.43
10-Aug	2978.57	3066.42	3183.54	3290.38	3328.37	2789.86	2533.80
11-Aug	2963.46	2971.01	3037.13	3212.83	3303.05	3322.04	3153.09
12-Aug	2955.90	2963.46	2978.57	3154.26	3290.38	3315.71	3328.37
13-Aug	2462.55	2489.13	2524.57	2569.90	2582.74	2728.71	2838.19
14-Aug	2522.89	2555.62	2550.91	2471.35	2480.27	2515.71	2540.72
15-Aug	3309.38	3328.37	2971.47	2566.52	2511.13	2458.09	2453.69
16-Aug	2471.35	2444.83	2480.27	2533.43	2569.46	2546.25	2655.73
17-Aug	3315.71	3334.70	2789.86	2577.43	2497.87	2444.83	2462.55
18-Aug	3284.05	3303.05	3328.37	2522.89	2564.17	2511.13	2471.35
19-Aug	3212.83	3271.39	3296.71	3334.70	2544.71	2564.17	2537.65
20-Aug	3154.26	3212.83	3284.05	3328.37	2522.89	2566.52	2564.17
21-Aug	3124.98	3212.83	3277.72	3322.04	2608.25	2555.62	2577.43
22-Aug	3095.70	3183.54	3271.39	3315.71	2789.86	2544.71	2566.52
23-Aug	3066.42	3154.26	3242.11	3309.38	2971.47	2533.80	2555.62
24-Aug	3095.70	3183.54	3271.39	3315.71	2789.86	2544.71	2566.52
25-Aug	3154.26	3212.83	3284.05	3328.37	2522.89	2566.52	2564.17
26-Aug	3154.26	3212.83	3284.05	3328.37	2522.89	2566.52	2564.17
27-Aug	3154.26	3212.83	3284.05	3328.37	2522.89	2566.52	2564.17

Table A30, continued. Summer 2002 allocation scenario time series results for the pool – cover guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	3277.72	3290.38	3315.71	2789.86	2577.43	2537.65	2497.87
29-Aug	2537.65	2511.13	2458.09	2497.99	2548.02	2577.19	2561.72
30-Aug	2608.25	2533.80	2577.43	2497.87	2471.41	2497.99	2524.57
31-Aug	3296.71	3315.71	3153.09	2544.71	2537.65	2484.61	2444.83
1-Sep	3242.11	3277.72	3303.05	3153.09	2555.62	2564.17	2524.39
2-Sep	3007.85	3095.70	3212.83	3296.71	3334.70	2608.25	2544.71
3-Sep	2967.24	2974.79	3066.42	3242.11	3309.38	3328.37	2971.47
4-Sep	2963.46	2971.01	3037.13	3212.83	3303.05	3322.04	3153.09
5-Sep	2948.35	2955.90	2971.01	3124.98	3277.72	3303.05	3315.71
6-Sep	2954.72	2940.79	2955.90	2978.57	3154.26	3271.39	3290.38
7-Sep	2955.90	2963.46	2978.57	3154.26	3290.38	3315.71	3328.37
8-Sep	2974.79	3037.13	3154.26	3284.05	3322.04	2971.47	2522.89
9-Sep	2971.01	2978.57	3095.70	3271.39	3315.71	3334.70	2789.86
10-Sep	2963.46	2971.01	3037.13	3212.83	3303.05	3322.04	3153.09
11-Sep	2952.12	2959.68	2974.79	3154.26	3284.05	3309.38	3322.04
12-Sep	2940.79	2952.12	2963.46	3066.42	3242.11	3290.38	3303.05
13-Sep	2954.72	2940.79	2955.90	2978.57	3154.26	3271.39	3290.38
14-Sep	2945.43	2948.35	2959.68	3037.13	3212.83	3284.05	3296.71
15-Sep	2952.12	2959.68	2974.79	3154.26	3284.05	3309.38	3322.04
16-Sep	2971.01	2978.57	3095.70	3271.39	3315.71	3334.70	2789.86
17-Sep	2967.24	2974.79	3066.42	3242.11	3309.38	3328.37	2971.47
18-Sep	2948.35	2955.90	2971.01	3124.98	3277.72	3303.05	3315.71
19-Sep	2952.12	2959.68	2974.79	3154.26	3284.05	3309.38	3322.04
20-Sep	2952.12	2959.68	2974.79	3154.26	3284.05	3309.38	3322.04
21-Sep	2608.25	2533.80	2577.43	2497.87	2471.41	2497.99	2524.57
22-Sep	2564.17	2524.39	2484.61	2480.27	2533.43	2562.60	2577.19
23-Sep	2544.71	2577.43	2524.39	2444.83	2497.99	2533.43	2555.31
24-Sep	2608.25	2533.80	2577.43	2497.87	2471.41	2497.99	2524.57
25-Sep	2546.25	2619.23	2765.20	2952.40	3034.86	3093.59	3123.58
26-Sep	3133.35	3109.35	3061.36	2986.42	2927.99	2937.00	2941.50
27-Sep	3727.38	3755.03	3735.39	3705.92	3676.45	3656.81	3642.08
28-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29-Sep	536.12	541.95	549.72	561.38	573.05	580.82	586.65
30-Sep	3692.48	3706.73	3735.23	3777.97	3827.83	3849.20	3870.58

Table A31. Summer 2002 allocation scenario time series results for the algae – midge guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	2640.87	2587.31	2533.76	2408.79	2301.68	2230.28	2194.57
2-Jun	2442.43	2454.45	2478.48	2514.53	2556.58	2580.62	2592.63
3-Jun	2166.06	2184.09	2202.11	2244.17	2280.22	2304.25	2316.26
4-Jun	2311.12	2285.80	2235.16	2146.54	2070.58	2075.94	2087.96
5-Jun	2247.82	2222.50	2171.86	2095.90	2081.95	2099.98	2118.00
6-Jun	2081.95	2099.98	2118.00	2160.06	2196.10	2220.14	2232.15
7-Jun	2057.92	2075.94	2099.98	2136.02	2172.07	2196.10	2214.13
8-Jun	2099.98	2111.99	2136.02	2178.08	2214.13	2238.16	2250.18
9-Jun	2663.05	2683.95	2652.94	2576.98	2501.02	2450.38	2412.40
10-Jun	2558.55	2572.48	2600.35	2642.15	2690.92	2652.94	2614.96
11-Jun	2440.12	2454.05	2481.92	2523.72	2572.48	2600.35	2614.29
12-Jun	2342.58	2356.51	2384.38	2426.18	2474.95	2502.82	2516.75
13-Jun	2398.31	2419.22	2447.08	2488.88	2530.68	2558.55	2579.45
14-Jun	2323.78	2285.80	2247.82	2159.20	2083.24	2069.94	2081.95
15-Jun	2178.08	2196.10	2214.13	2256.18	2292.23	2316.26	2328.28
16-Jun	2322.27	2340.30	2364.33	2400.38	2436.42	2460.46	2472.47
17-Jun	2670.02	2690.92	2640.28	2564.32	2488.36	2437.72	2399.74
18-Jun	2537.65	2551.58	2579.45	2621.25	2670.02	2678.26	2652.94
19-Jun	2405.28	2426.18	2447.08	2495.85	2537.65	2565.52	2579.45
20-Jun	3140.85	2542.15	2356.51	2405.28	2447.08	2474.95	2488.88
21-Jun	2558.55	2579.45	2607.32	2649.12	2690.92	2640.28	2602.30
22-Jun	2398.31	2419.22	2447.08	2488.88	2530.68	2558.55	2579.45
23-Jun	4271.94	4316.15	3739.56	2542.15	2384.38	2412.25	2426.18
24-Jun	3999.70	4033.27	4100.41	4227.73	3939.12	3140.85	2741.72
25-Jun	4784.39	4426.52	3949.35	4050.05	4161.40	4249.83	4316.15
26-Jun	5019.70	5111.63	4903.69	4068.64	4033.27	4100.41	4139.30
27-Jun	4958.42	5050.34	5142.27	4307.23	3999.70	4066.84	4100.41
28-Jun	2663.05	2683.95	2652.94	2576.98	2501.02	2450.38	2412.40
29-Jun	2628.22	2642.15	2670.02	2652.94	2564.32	2513.68	2488.36
30-Jun	2069.94	2087.96	2111.99	2148.04	2184.09	2208.12	2226.14
1-Jul	4016.49	4050.05	4117.19	4249.83	3739.56	2941.28	2542.15
2-Jul	2342.58	2356.51	2384.38	2426.18	2474.95	2502.82	2516.75
3-Jul	3939.12	3340.42	2542.15	2377.41	2419.22	2447.08	2467.98
4-Jul	4784.39	4426.52	3949.35	4050.05	4161.40	4249.83	4316.15
5-Jul	3956.99	3848.16	4243.24	4835.85	5019.70	5142.27	4784.39
6-Jul	4756.71	4459.18	4138.37	3920.71	4243.24	4638.31	4866.49
7-Jul	5467.91	5119.31	4904.55	4335.05	4029.54	3884.44	3946.93
8-Jul	6120.15	6048.92	5584.12	4953.83	4459.18	4174.64	4065.82
9-Jul	5850.32	5940.27	6120.15	5467.91	4904.55	4707.43	4459.18
10-Jul	5628.06	5760.38	5940.27	6048.92	5351.71	4953.83	4805.99
11-Jul	5365.52	5540.71	5715.41	5985.24	5816.52	5467.91	5119.31
12-Jul	4926.86	5365.52	5628.06	5895.29	6048.92	5584.12	5351.71
13-Jul	5467.91	5119.31	4904.55	4335.05	4029.54	3884.44	3946.93
14-Jul	4784.39	4426.52	3949.35	4050.05	4161.40	4249.83	4316.15

Table A31, continued. Summer 2002 allocation scenario time series results for the algae – midge guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	4665.10	4307.23	3966.13	4066.84	4183.51	4271.94	4338.26
16-Jul	4210.92	4138.37	3993.26	4144.47	4737.08	4927.78	4989.06
17-Jul	4665.10	4307.23	3966.13	4066.84	4183.51	4271.94	4338.26
18-Jul	4440.77	4638.31	4897.13	5080.99	4545.81	4068.64	3966.13
19-Jul	4583.30	4210.92	4102.09	3848.16	4440.77	4835.85	4897.13
20-Jul	5700.32	5351.71	5003.11	4583.30	4102.09	3956.99	3884.44
21-Jul	6075.18	6165.12	5700.32	5003.11	4583.30	4210.92	4102.09
22-Jul	5985.24	6075.18	5932.72	5235.51	4756.71	4335.05	4174.64
23-Jul	5895.29	5985.24	6165.12	5351.71	4855.27	4583.30	4335.05
24-Jul	5850.32	5940.27	6120.15	5467.91	4904.55	4707.43	4459.18
25-Jul	5940.27	6030.21	6048.92	5351.71	4805.99	4459.18	4210.92
26-Jul	5850.32	5940.27	6120.15	5467.91	4904.55	4707.43	4459.18
27-Jul	4904.55	4805.99	4459.18	4065.82	3946.93	4243.24	4539.54
28-Jul	4835.85	4897.13	5019.70	4903.69	4187.93	3982.92	4033.27
29-Jul	4338.26	3939.12	3140.85	2356.51	2405.28	2426.18	2447.08
30-Jul	2342.58	2356.51	2384.38	2426.18	2474.95	2502.82	2516.75
31-Jul	4784.39	4545.81	4068.64	4033.27	4161.40	4227.73	4294.05
1-Aug	3848.16	4144.47	4539.54	4927.78	5111.63	4784.39	4426.52
2-Aug	6030.21	6120.15	5816.52	5119.31	4707.43	4335.05	4138.37
3-Aug	5365.52	5540.71	5715.41	5985.24	5816.52	5467.91	5119.31
4-Aug	4354.28	4707.52	5365.52	5760.38	6030.21	6048.92	5816.52
5-Aug	5365.52	5540.71	5715.41	5985.24	5816.52	5467.91	5119.31
6-Aug	5467.91	5119.31	4904.55	4335.05	4029.54	3884.44	3946.93
7-Aug	6048.92	5700.32	5235.51	4805.99	4210.92	4065.82	3956.99
8-Aug	4421.23	4707.52	5497.03	5805.35	6075.18	5932.72	5700.32
9-Aug	3875.94	3841.55	3885.59	4354.28	5365.52	5628.06	5715.41
10-Aug	3933.25	3898.86	3853.02	4019.50	4421.23	5146.19	5540.71
11-Aug	3968.11	3950.68	3910.33	3841.55	4153.41	4354.28	4707.52
12-Aug	3985.54	3968.11	3933.25	3864.48	4019.50	4287.32	4421.23
13-Aug	5932.72	5584.12	5119.31	4756.71	4174.64	4029.54	3920.71
14-Aug	5497.03	5628.06	5805.35	6075.18	5700.32	5235.51	4953.83
15-Aug	4220.37	4421.23	4926.86	5671.73	5940.27	6120.15	6048.92
16-Aug	6075.18	6165.12	5700.32	5003.11	4583.30	4210.92	4102.09
17-Aug	4287.32	4488.19	5146.19	5715.41	5985.24	6165.12	5932.72
18-Aug	3952.54	4153.41	4421.23	5497.03	5760.38	5940.27	6075.18
19-Aug	3841.55	3818.63	4086.45	4488.19	5584.38	5760.38	5850.32
20-Aug	3864.48	3841.55	3952.54	4421.23	5497.03	5671.73	5760.38
21-Aug	3875.94	3841.55	3885.59	4354.28	5365.52	5628.06	5715.41
22-Aug	3887.40	3853.02	3818.63	4287.32	5146.19	5584.38	5671.73
23-Aug	3898.86	3864.48	3830.09	4220.37	4926.86	5540.71	5628.06
24-Aug	3887.40	3853.02	3818.63	4287.32	5146.19	5584.38	5671.73
25-Aug	3864.48	3841.55	3952.54	4421.23	5497.03	5671.73	5760.38
26-Aug	3864.48	3841.55	3952.54	4421.23	5497.03	5671.73	5760.38
27-Aug	3864.48	3841.55	3952.54	4421.23	5497.03	5671.73	5760.38

Table A31, continued. Summer 2002 allocation scenario time series results for the algae – midge guild at the Spring Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	3885.59	4019.50	4287.32	5146.19	5715.41	5850.32	5985.24
29-Aug	5850.32	5940.27	6120.15	5467.91	4904.55	4707.43	4459.18
30-Aug	5365.52	5540.71	5715.41	5985.24	5816.52	5467.91	5119.31
31-Aug	4086.45	4287.32	4707.52	5584.38	5850.32	6030.21	6165.12
1-Sep	3830.09	3885.59	4153.41	4707.52	5628.06	5760.38	5895.29
2-Sep	3921.79	3887.40	3841.55	4086.45	4488.19	5365.52	5584.38
3-Sep	3959.40	3941.97	3898.86	3830.09	4220.37	4421.23	4926.86
4-Sep	3968.11	3950.68	3910.33	3841.55	4153.41	4354.28	4707.52
5-Sep	4002.97	3985.54	3950.68	3875.94	3885.59	4153.41	4287.32
6-Sep	4000.45	4020.40	3985.54	3933.25	3864.48	3818.63	4019.50
7-Sep	3985.54	3968.11	3933.25	3864.48	4019.50	4287.32	4421.23
8-Sep	3941.97	3910.33	3864.48	3952.54	4354.28	4926.86	5497.03
9-Sep	3950.68	3933.25	3887.40	3818.63	4287.32	4488.19	5146.19
10-Sep	3968.11	3950.68	3910.33	3841.55	4153.41	4354.28	4707.52
11-Sep	3994.26	3976.83	3941.97	3864.48	3952.54	4220.37	4354.28
12-Sep	4020.40	3994.26	3968.11	3898.86	3830.09	4019.50	4153.41
13-Sep	4000.45	4020.40	3985.54	3933.25	3864.48	3818.63	4019.50
14-Sep	4013.75	4002.97	3976.83	3910.33	3841.55	3952.54	4086.45
15-Sep	3994.26	3976.83	3941.97	3864.48	3952.54	4220.37	4354.28
16-Sep	3950.68	3933.25	3887.40	3818.63	4287.32	4488.19	5146.19
17-Sep	3959.40	3941.97	3898.86	3830.09	4220.37	4421.23	4926.86
18-Sep	4002.97	3985.54	3950.68	3875.94	3885.59	4153.41	4287.32
19-Sep	3994.26	3976.83	3941.97	3864.48	3952.54	4220.37	4354.28
20-Sep	3994.26	3976.83	3941.97	3864.48	3952.54	4220.37	4354.28
21-Sep	5365.52	5540.71	5715.41	5985.24	5816.52	5467.91	5119.31
22-Sep	5760.38	5895.29	6030.21	5700.32	5003.11	4805.99	4707.43
23-Sep	5584.38	5715.41	5895.29	6165.12	5467.91	5003.11	4855.27
24-Sep	5365.52	5540.71	5715.41	5985.24	5816.52	5467.91	5119.31
25-Sep	4210.92	4138.37	3993.26	4144.47	4737.08	4927.78	4989.06
26-Sep	3999.70	4033.27	4100.41	4227.73	3939.12	3140.85	2741.72
27-Sep	2676.99	2678.26	2627.62	2551.66	2475.70	2425.06	2387.08
28-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29-Sep	4118.60	4122.15	4126.87	4133.96	4141.05	4145.78	4149.32
30-Sep	2208.12	2220.14	2244.17	2280.22	2322.27	2340.30	2358.32

Table A32. Summer 1999 allocation scenario time series results for the fast generalist guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
2-Jun	123.60	127.23	134.50	145.41	145.41	145.41	145.41
3-Jun	109.06	109.06	109.06	118.15	129.05	136.32	141.77
4-Jun	109.06	109.06	109.06	112.69	123.60	130.87	136.32
5-Jun	109.06	110.88	118.15	129.05	141.77	145.41	145.41
6-Jun	109.06	109.06	114.51	125.41	136.32	143.59	145.41
7-Jun	109.06	109.06	110.88	121.78	134.50	139.96	145.41
8-Jun	109.06	109.06	109.06	118.15	129.05	136.32	141.77
9-Jun	109.58	109.06	109.06	109.06	109.06	112.69	116.33
10-Jun	110.10	109.06	109.06	109.06	109.06	109.06	114.51
11-Jun	113.73	112.17	110.10	109.06	109.06	109.06	109.06
12-Jun	108.43	114.25	112.17	109.06	109.06	109.06	109.06
13-Jun	108.43	114.25	112.17	109.06	109.06	109.06	109.06
14-Jun	108.43	114.25	112.17	109.06	109.06	109.06	109.06
15-Jun	108.43	114.25	112.17	109.06	109.06	109.06	109.06
16-Jun	108.43	114.25	112.17	109.06	109.06	109.06	109.06
17-Jun	112.17	111.14	109.06	109.06	109.06	109.06	109.06
18-Jun	111.66	110.62	109.06	109.06	109.06	109.06	109.06
19-Jun	108.43	113.73	111.66	109.06	109.06	109.06	109.06
20-Jun	105.53	111.34	112.69	109.58	109.06	109.06	109.06
21-Jun	105.53	111.34	112.69	109.58	109.06	109.06	109.06
22-Jun	102.62	111.34	113.21	109.58	109.06	109.06	109.06
23-Jun	96.80	102.62	114.25	111.14	109.06	109.06	109.06
24-Jun	88.08	96.80	108.43	112.17	109.06	109.06	109.06
25-Jun	88.08	96.80	108.43	112.17	109.06	109.06	109.06
26-Jun	90.99	99.71	108.43	111.66	109.06	109.06	109.06
27-Jun	96.80	102.62	114.25	111.14	109.06	109.06	109.06
28-Jun	108.43	113.73	111.66	109.06	109.06	109.06	109.06
29-Jun	108.43	114.25	112.17	109.06	109.06	109.06	109.06
30-Jun	108.43	114.25	112.17	109.06	109.06	109.06	109.06
1-Jul	108.43	114.25	112.17	109.06	109.06	109.06	109.06
2-Jul	108.43	114.25	112.17	109.06	109.06	109.06	109.06
3-Jul	90.99	99.71	108.43	111.66	109.06	109.06	109.06
4-Jul	66.27	73.36	80.44	99.71	113.73	111.66	110.62
5-Jul	61.54	66.27	75.72	90.99	111.34	112.69	111.66
6-Jul	66.27	73.36	80.44	99.71	113.73	111.66	110.62
7-Jul	80.44	88.08	99.71	113.73	110.62	109.06	109.06
8-Jul	75.72	80.44	90.99	111.34	111.66	109.58	109.06
9-Jul	68.63	73.36	82.81	102.62	113.21	111.14	110.10
10-Jul	68.63	73.36	82.81	102.62	113.21	111.14	110.10
11-Jul	63.90	70.99	80.44	96.80	114.25	112.17	110.62
12-Jul	63.90	70.99	80.44	96.80	114.25	112.17	110.62
13-Jul	63.90	70.99	80.44	96.80	114.25	112.17	110.62
14-Jul	66.27	73.36	80.44	99.71	113.73	111.66	110.62

Table A32, continued. Summer 1999 allocation scenario time series results for the fast generalist guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Microhabitat Index						
	Site Q	+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	63.90	70.99	80.44	96.80	114.25	112.17	110.62
16-Jul	63.90	70.99	80.44	96.80	114.25	112.17	110.62
17-Jul	63.90	68.63	78.08	93.89	114.25	112.69	111.14
18-Jul	63.90	68.63	78.08	93.89	114.25	112.69	111.14
19-Jul	61.54	66.27	75.72	90.99	111.34	112.69	111.66
20-Jul	61.54	66.27	75.72	90.99	111.34	112.69	111.66
21-Jul	61.54	66.27	75.72	90.99	111.34	112.69	111.66
22-Jul	70.99	75.72	85.17	102.62	112.69	111.14	109.58
23-Jul	99.71	108.43	113.21	110.10	109.06	109.06	109.06
24-Jul	114.25	113.21	111.14	109.06	109.06	109.06	109.06
25-Jul	82.81	90.99	99.71	113.21	110.10	109.06	109.06
26-Jul	78.08	82.81	93.89	111.34	111.14	109.58	109.06
27-Jul	70.99	75.72	85.17	102.62	112.69	111.14	109.58
28-Jul	70.99	75.72	85.17	102.62	112.69	111.14	109.58
29-Jul	68.63	73.36	82.81	102.62	113.21	111.14	110.10
30-Jul	70.99	75.72	85.17	102.62	112.69	111.14	109.58
31-Jul	70.99	75.72	85.17	102.62	112.69	111.14	109.58
1-Aug	70.99	75.72	85.17	102.62	112.69	111.14	109.58
2-Aug	70.99	75.72	85.17	102.62	112.69	111.14	109.58
3-Aug	70.99	75.72	85.17	102.62	112.69	111.14	109.58
4-Aug	70.99	75.72	85.17	102.62	112.69	111.14	109.58
5-Aug	70.99	75.72	85.17	102.62	112.69	111.14	109.58
6-Aug	68.63	73.36	82.81	102.62	113.21	111.14	110.10
7-Aug	68.63	73.36	82.81	102.62	113.21	111.14	110.10
8-Aug	68.63	73.36	82.81	102.62	113.21	111.14	110.10
9-Aug	70.99	75.72	85.17	102.62	112.69	111.14	109.58
10-Aug	70.99	75.72	85.17	102.62	112.69	111.14	109.58
11-Aug	66.27	73.36	80.44	99.71	113.73	111.66	110.62
12-Aug	63.90	68.63	78.08	93.89	114.25	112.69	111.14
13-Aug	66.27	73.36	80.44	99.71	113.73	111.66	110.62
14-Aug	82.81	90.99	99.71	113.21	110.10	109.06	109.06
15-Aug	99.71	108.43	113.21	110.10	109.06	109.06	109.06
16-Aug	108.43	114.25	112.17	109.06	109.06	109.06	109.06
17-Aug	85.17	90.99	102.62	113.21	109.58	109.06	109.06
18-Aug	80.44	85.17	96.80	114.25	111.14	109.06	109.06
19-Aug	75.72	80.44	90.99	111.34	111.66	109.58	109.06
20-Aug	88.08	96.80	108.43	112.17	109.06	109.06	109.06
21-Aug	113.73	112.17	110.10	109.06	109.06	109.06	109.06
22-Aug	111.34	113.21	111.66	109.06	109.06	109.06	109.06
23-Aug	132.68	138.14	145.41	145.41	145.41	145.41	145.41
24-Aug	138.14	141.77	145.41	145.41	145.41	145.41	145.41
25-Aug	145.41	145.41	145.41	145.41	145.41	145.41	145.41
26-Aug	119.96	125.41	132.68	143.59	145.41	145.41	145.41
27-Aug	109.06	109.06	109.06	119.96	130.87	138.14	141.77

Table A32, continued. Summer 1999 allocation scenario time series results for the fast generalist guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	145.41	145.41	145.41	145.41	145.41	145.41	145.41
29-Aug	145.41	145.41	145.41	145.41	145.41	145.41	145.41
30-Aug	145.41	145.41	145.41	145.41	145.41	145.41	145.41
31-Aug	145.41	145.41	145.41	145.41	145.41	145.41	145.41
1-Sep	125.41	129.05	136.32	145.41	145.41	145.41	145.41
2-Sep	109.06	109.06	110.88	121.78	134.50	139.96	145.41
3-Sep	109.06	109.06	109.06	114.51	125.41	132.68	136.32
4-Sep	109.06	109.06	109.06	110.88	121.78	129.05	134.50
5-Sep	145.41	145.41	145.41	145.41	145.41	145.41	145.41
6-Sep	140.32	139.96	139.23	137.96	136.87	136.14	135.77
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10-Sep	84.99	84.67	84.34	83.58	82.92	82.49	82.27
11-Sep	130.14	129.59	128.87	127.78	126.14	124.69	123.60
12-Sep	145.41	145.41	145.05	143.96	142.86	142.14	141.59
13-Sep	145.41	145.41	145.41	145.41	145.41	145.41	145.41
14-Sep	145.41	145.41	145.41	145.41	145.41	145.41	145.41
15-Sep	145.41	145.41	145.41	145.41	145.41	145.41	145.41
16-Sep	125.41	124.69	123.23	121.05	118.51	117.42	116.33
17-Sep	97.06	96.33	94.88	92.33	90.66	90.23	90.01
18-Sep	115.23	114.14	112.69	110.51	108.33	106.87	105.78
19-Sep	145.41	145.41	145.41	144.50	143.41	142.68	142.14
20-Sep	145.41	145.41	145.41	145.41	145.41	145.41	145.41
21-Sep	145.41	145.41	145.41	145.41	145.41	145.41	145.41
22-Sep	112.69	111.96	110.51	108.33	106.15	104.69	103.60
23-Sep	84.34	84.12	83.69	83.03	82.27	81.94	81.62
24-Sep	113.78	112.69	111.60	109.06	106.87	105.42	104.69
25-Sep	138.14	137.59	136.87	135.77	134.68	133.96	133.41
26-Sep	145.41	145.41	145.41	145.41	145.41	145.23	144.68
27-Sep	145.41	145.41	145.41	145.41	145.41	145.41	145.41
28-Sep	145.41	145.41	145.41	145.41	145.41	145.41	145.41
29-Sep	145.41	145.41	145.41	145.41	145.41	145.41	145.41
30-Sep	88.26	88.05	87.61	86.85	86.19	85.76	85.54

Table A33. Summer 1999 allocation scenario time series results for the pool – run guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	14136.73	14107.90	14009.93	13829.94	13735.69	13684.72	13675.62
2-Jun	13947.41	14001.91	14078.90	14184.78	14127.12	14068.84	14009.93
3-Jun	13563.41	13625.65	13708.64	13865.65	14021.16	14098.15	14155.89
4-Jun	13435.40	13563.41	13646.40	13783.89	13947.41	14040.41	14098.15
5-Jun	13708.64	13756.64	13865.65	14021.16	14155.89	14184.78	14155.95
6-Jun	13646.40	13708.64	13811.15	13974.66	14098.15	14175.14	14175.17
7-Jun	13625.65	13667.15	13756.64	13920.15	14078.90	14136.65	14194.39
8-Jun	13563.41	13625.65	13708.64	13865.65	14021.16	14098.15	14155.89
9-Jun	12588.38	12829.85	13175.88	13563.41	13687.89	13783.89	13838.40
10-Jun	12519.93	12656.83	13002.86	13521.91	13667.15	13729.39	13811.15
11-Jun	12040.78	12246.13	12519.93	13002.86	13521.91	13604.90	13667.15
12-Jun	11786.10	11972.33	12246.13	12656.83	13262.39	13521.91	13584.15
13-Jun	11786.10	11972.33	12246.13	12656.83	13262.39	13521.91	13584.15
14-Jun	11786.10	11972.33	12246.13	12656.83	13262.39	13521.91	13584.15
15-Jun	11786.10	11972.33	12246.13	12656.83	13262.39	13521.91	13584.15
16-Jun	11786.10	11972.33	12246.13	12656.83	13262.39	13521.91	13584.15
17-Jun	12246.13	12383.03	12656.83	13175.88	13584.15	13667.15	13708.64
18-Jun	12314.58	12451.48	12743.34	13262.39	13604.90	13667.15	13729.39
19-Jun	11786.10	12040.78	12314.58	12743.34	13262.39	13542.66	13604.90
20-Jun	11692.98	11879.21	12177.68	12588.38	13175.88	13521.91	13563.41
21-Jun	11692.98	11879.21	12177.68	12588.38	13175.88	13521.91	13563.41
22-Jun	11599.87	11879.21	12109.23	12588.38	13089.37	13435.40	13542.66
23-Jun	11413.63	11599.87	11972.33	12383.03	12916.35	13175.88	13435.40
24-Jun	11134.29	11413.63	11786.10	12246.13	12656.83	13002.86	13262.39
25-Jun	11134.29	11413.63	11786.10	12246.13	12656.83	13002.86	13262.39
26-Jun	11227.40	11506.75	11786.10	12314.58	12743.34	13089.37	13262.39
27-Jun	11413.63	11599.87	11972.33	12383.03	12916.35	13175.88	13435.40
28-Jun	11786.10	12040.78	12314.58	12743.34	13262.39	13542.66	13604.90
29-Jun	11786.10	11972.33	12246.13	12656.83	13262.39	13521.91	13584.15
30-Jun	11786.10	11972.33	12246.13	12656.83	13262.39	13521.91	13584.15
1-Jul	11786.10	11972.33	12246.13	12656.83	13262.39	13521.91	13584.15
2-Jul	11786.10	11972.33	12246.13	12656.83	13262.39	13521.91	13584.15
3-Jul	11227.40	11506.75	11786.10	12314.58	12743.34	13089.37	13262.39
4-Jul	9630.19	10159.30	10688.42	11506.75	12040.78	12314.58	12451.48
5-Jul	9277.44	9630.19	10335.68	11227.40	11879.21	12177.68	12314.58
6-Jul	9630.19	10159.30	10688.42	11506.75	12040.78	12314.58	12451.48
7-Jul	10688.42	11134.29	11506.75	12040.78	12451.48	12743.34	13002.86
8-Jul	10335.68	10688.42	11227.40	11879.21	12314.58	12588.38	12743.34
9-Jul	9806.56	10159.30	10864.80	11599.87	12109.23	12383.03	12519.93
10-Jul	9806.56	10159.30	10864.80	11599.87	12109.23	12383.03	12519.93
11-Jul	9453.81	9982.93	10688.42	11413.63	11972.33	12246.13	12451.48
12-Jul	9453.81	9982.93	10688.42	11413.63	11972.33	12246.13	12451.48
13-Jul	9453.81	9982.93	10688.42	11413.63	11972.33	12246.13	12451.48
14-Jul	9630.19	10159.30	10688.42	11506.75	12040.78	12314.58	12451.48

Table A33, continued. Summer 1999 allocation scenario time series results for the pool – run guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	9453.81	9982.93	10688.42	11413.63	11972.33	12246.13	12451.48
16-Jul	9453.81	9982.93	10688.42	11413.63	11972.33	12246.13	12451.48
17-Jul	9453.81	9806.56	10512.05	11320.52	11972.33	12177.68	12383.03
18-Jul	9453.81	9806.56	10512.05	11320.52	11972.33	12177.68	12383.03
19-Jul	9277.44	9630.19	10335.68	11227.40	11879.21	12177.68	12314.58
20-Jul	9277.44	9630.19	10335.68	11227.40	11879.21	12177.68	12314.58
21-Jul	9277.44	9630.19	10335.68	11227.40	11879.21	12177.68	12314.58
22-Jul	9982.93	10335.68	11041.17	11599.87	12177.68	12383.03	12588.38
23-Jul	11506.75	11786.10	12109.23	12519.93	13002.86	13348.89	13542.66
24-Jul	11972.33	12109.23	12383.03	12916.35	13435.40	13584.15	13625.65
25-Jul	10864.80	11227.40	11506.75	12109.23	12519.93	12829.85	13002.86
26-Jul	10512.05	10864.80	11320.52	11879.21	12383.03	12588.38	12829.85
27-Jul	9982.93	10335.68	11041.17	11599.87	12177.68	12383.03	12588.38
28-Jul	9982.93	10335.68	11041.17	11599.87	12177.68	12383.03	12588.38
29-Jul	9806.56	10159.30	10864.80	11599.87	12109.23	12383.03	12519.93
30-Jul	9982.93	10335.68	11041.17	11599.87	12177.68	12383.03	12588.38
31-Jul	9982.93	10335.68	11041.17	11599.87	12177.68	12383.03	12588.38
1-Aug	9982.93	10335.68	11041.17	11599.87	12177.68	12383.03	12588.38
2-Aug	9982.93	10335.68	11041.17	11599.87	12177.68	12383.03	12588.38
3-Aug	9982.93	10335.68	11041.17	11599.87	12177.68	12383.03	12588.38
4-Aug	9982.93	10335.68	11041.17	11599.87	12177.68	12383.03	12588.38
5-Aug	9982.93	10335.68	11041.17	11599.87	12177.68	12383.03	12588.38
6-Aug	9806.56	10159.30	10864.80	11599.87	12109.23	12383.03	12519.93
7-Aug	9806.56	10159.30	10864.80	11599.87	12109.23	12383.03	12519.93
8-Aug	9806.56	10159.30	10864.80	11599.87	12109.23	12383.03	12519.93
9-Aug	9982.93	10335.68	11041.17	11599.87	12177.68	12383.03	12588.38
10-Aug	9982.93	10335.68	11041.17	11599.87	12177.68	12383.03	12588.38
11-Aug	9630.19	10159.30	10688.42	11506.75	12040.78	12314.58	12451.48
12-Aug	9453.81	9806.56	10512.05	11320.52	11972.33	12177.68	12383.03
13-Aug	9630.19	10159.30	10688.42	11506.75	12040.78	12314.58	12451.48
14-Aug	10864.80	11227.40	11506.75	12109.23	12519.93	12829.85	13002.86
15-Aug	11506.75	11786.10	12109.23	12519.93	13002.86	13348.89	13542.66
16-Aug	11786.10	11972.33	12246.13	12656.83	13262.39	13521.91	13584.15
17-Aug	11041.17	11227.40	11599.87	12109.23	12588.38	12916.35	13089.37
18-Aug	10688.42	11041.17	11413.63	11972.33	12383.03	12656.83	12916.35
19-Aug	10335.68	10688.42	11227.40	11879.21	12314.58	12588.38	12743.34
20-Aug	11134.29	11413.63	11786.10	12246.13	12656.83	13002.86	13262.39
21-Aug	12040.78	12246.13	12519.93	13002.86	13521.91	13604.90	13667.15
22-Aug	11879.21	12109.23	12314.58	12829.85	13348.89	13563.41	13604.90
23-Aug	14059.65	14117.40	14194.39	14136.73	14039.38	13921.57	13829.94
24-Aug	14117.40	14155.89	14175.17	14117.51	13951.02	13860.49	13786.66
25-Aug	14184.78	14155.95	14127.12	13980.48	13799.40	13748.43	13722.95
26-Aug	13892.90	13974.66	14059.65	14175.14	14146.34	14107.90	14039.38
27-Aug	13584.15	13646.40	13708.64	13892.90	14040.41	14117.40	14155.89

Table A33, continued. Summer 1999 allocation scenario time series results for the pool – run guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	14098.29	14009.93	13891.03	13761.17	13684.72	13677.43	13682.89
29-Aug	13264.37	13152.99	13056.88	12755.36	12331.39	12137.78	12085.51
30-Aug	13679.25	13682.89	13690.16	13406.30	13120.95	13024.84	12928.73
31-Aug	14136.73	14117.51	14039.38	13860.49	13735.69	13697.46	13673.80
1-Sep	13974.66	14021.16	14098.15	14184.78	14117.51	14068.84	13980.48
2-Sep	13625.65	13667.15	13756.64	13920.15	14078.90	14136.65	14194.39
3-Sep	13521.91	13584.15	13646.40	13811.15	13974.66	14059.65	14098.15
4-Sep	13348.89	13542.66	13625.65	13756.64	13920.15	14021.16	14078.90
5-Sep	13761.17	13735.69	13684.72	13681.07	13595.54	13453.61	13311.68
6-Sep	9797.45	9751.11	9658.44	9496.26	9357.26	9264.58	9218.25
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10-Sep	5632.33	5593.25	5554.16	5462.97	5384.80	5332.69	5306.63
11-Sep	8500.03	8430.53	8337.85	8198.85	8075.54	8003.80	7949.99
12-Sep	10527.39	10478.65	10399.82	10260.81	10121.81	10029.13	9959.63
13-Sep	11488.80	11454.25	11408.20	11339.10	11270.01	11209.76	11161.02
14-Sep	11928.68	11928.68	11928.68	11841.60	11737.09	11667.43	11626.98
15-Sep	12614.04	12472.71	12190.06	12033.23	11928.68	11928.68	11928.68
16-Sep	8039.67	8003.80	7932.06	7824.45	7698.90	7645.10	7591.29
17-Sep	6640.74	6604.87	6533.13	6407.59	6309.79	6257.68	6231.63
18-Sep	7537.49	7483.68	7411.94	7304.33	7196.73	7124.99	7071.18
19-Sep	10576.13	10527.39	10462.41	10330.32	10191.31	10098.64	10029.13
20-Sep	11258.50	11209.76	11144.77	11047.29	10949.81	10884.82	10836.08
21-Sep	11161.02	11128.53	11063.54	10949.81	10852.33	10787.34	10754.85
22-Sep	7411.94	7376.07	7304.33	7196.73	7089.12	7017.38	6963.57
23-Sep	5554.16	5528.11	5476.00	5397.83	5306.63	5267.55	5228.46
24-Sep	7465.75	7411.94	7358.14	7232.60	7124.99	7053.25	7017.38
25-Sep	9519.43	9449.93	9357.26	9218.25	9079.24	8986.56	8917.06
26-Sep	10803.59	10754.85	10689.86	10592.38	10494.90	10422.99	10353.49
27-Sep	11373.65	11350.62	11304.56	11226.01	11112.28	11063.54	11014.80
28-Sep	11626.98	11603.95	11557.89	11477.29	11408.20	11362.13	11339.10
29-Sep	11511.83	11477.29	11442.74	11362.13	11293.04	11242.25	11209.76
30-Sep	6023.18	5997.12	5945.01	5853.81	5775.64	5723.53	5697.47

Table A34. Summer 1999 allocation scenario time series results for the pool – cover guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	1201.38	1182.04	1156.88	1170.55	1180.45	1179.74	1176.29
2-Jun	1341.50	1343.68	1302.23	1233.61	1194.93	1169.35	1156.88
3-Jun	1412.81	1382.81	1342.79	1338.24	1333.32	1291.87	1260.78
4-Jun	1437.10	1412.81	1372.80	1334.97	1341.50	1322.96	1291.87
5-Jun	1342.79	1333.88	1338.24	1333.32	1260.78	1233.61	1214.27
6-Jun	1372.80	1342.79	1336.06	1342.59	1291.87	1250.42	1227.17
7-Jun	1382.81	1362.80	1333.88	1340.41	1302.23	1271.15	1240.06
8-Jun	1412.81	1382.81	1342.79	1338.24	1333.32	1291.87	1260.78
9-Jun	1474.36	1467.02	1449.92	1412.81	1352.80	1334.97	1337.15
10-Jun	1473.16	1475.57	1458.47	1432.82	1362.80	1332.79	1336.06
11-Jun	1464.72	1468.33	1473.16	1458.47	1432.82	1392.81	1362.80
12-Jun	1473.57	1463.51	1468.33	1475.57	1445.65	1432.82	1402.81
13-Jun	1473.57	1463.51	1468.33	1475.57	1445.65	1432.82	1402.81
14-Jun	1473.57	1463.51	1468.33	1475.57	1445.65	1432.82	1402.81
15-Jun	1473.57	1463.51	1468.33	1475.57	1445.65	1432.82	1402.81
16-Jun	1473.57	1463.51	1468.33	1475.57	1445.65	1432.82	1402.81
17-Jun	1468.33	1470.75	1475.57	1449.92	1402.81	1362.80	1342.79
18-Jun	1469.54	1471.95	1471.30	1445.65	1392.81	1362.80	1332.79
19-Jun	1473.57	1464.72	1469.54	1471.30	1445.65	1422.82	1392.81
20-Jun	1478.59	1468.54	1467.13	1474.36	1449.92	1432.82	1412.81
21-Jun	1478.59	1468.54	1467.13	1474.36	1449.92	1432.82	1412.81
22-Jun	1483.62	1468.54	1465.92	1474.36	1454.20	1437.10	1422.82
23-Jun	1493.68	1483.62	1463.51	1470.75	1462.75	1449.92	1437.10
24-Jun	1508.76	1493.68	1473.57	1468.33	1475.57	1458.47	1445.65
25-Jun	1508.76	1493.68	1473.57	1468.33	1475.57	1458.47	1445.65
26-Jun	1503.73	1488.65	1473.57	1469.54	1471.30	1454.20	1445.65
27-Jun	1493.68	1483.62	1463.51	1470.75	1462.75	1449.92	1437.10
28-Jun	1473.57	1464.72	1469.54	1471.30	1445.65	1422.82	1392.81
29-Jun	1473.57	1463.51	1468.33	1475.57	1445.65	1432.82	1402.81
30-Jun	1473.57	1463.51	1468.33	1475.57	1445.65	1432.82	1402.81
1-Jul	1473.57	1463.51	1468.33	1475.57	1445.65	1432.82	1402.81
2-Jul	1473.57	1463.51	1468.33	1475.57	1445.65	1432.82	1402.81
3-Jul	1503.73	1488.65	1473.57	1469.54	1471.30	1454.20	1445.65
4-Jul	1418.71	1454.37	1490.02	1488.65	1464.72	1469.54	1471.95
5-Jul	1394.94	1418.71	1466.25	1503.73	1468.54	1467.13	1469.54
6-Jul	1418.71	1454.37	1490.02	1488.65	1464.72	1469.54	1471.95
7-Jul	1490.02	1508.76	1488.65	1464.72	1471.95	1471.30	1458.47
8-Jul	1466.25	1490.02	1503.73	1468.54	1469.54	1474.36	1471.30
9-Jul	1430.60	1454.37	1501.91	1483.62	1465.92	1470.75	1473.16
10-Jul	1430.60	1454.37	1501.91	1483.62	1465.92	1470.75	1473.16
11-Jul	1406.83	1442.48	1490.02	1493.68	1463.51	1468.33	1471.95
12-Jul	1406.83	1442.48	1490.02	1493.68	1463.51	1468.33	1471.95
13-Jul	1406.83	1442.48	1490.02	1493.68	1463.51	1468.33	1471.95
14-Jul	1418.71	1454.37	1490.02	1488.65	1464.72	1469.54	1471.95

Table A34, continued. Summer 1999 allocation scenario time series results for the pool – cover guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	1406.83	1442.48	1490.02	1493.68	1463.51	1468.33	1471.95
16-Jul	1406.83	1442.48	1490.02	1493.68	1463.51	1468.33	1471.95
17-Jul	1406.83	1430.60	1478.14	1498.71	1463.51	1467.13	1470.75
18-Jul	1406.83	1430.60	1478.14	1498.71	1463.51	1467.13	1470.75
19-Jul	1394.94	1418.71	1466.25	1503.73	1468.54	1467.13	1469.54
20-Jul	1394.94	1418.71	1466.25	1503.73	1468.54	1467.13	1469.54
21-Jul	1394.94	1418.71	1466.25	1503.73	1468.54	1467.13	1469.54
22-Jul	1442.48	1466.25	1513.79	1483.62	1467.13	1470.75	1474.36
23-Jul	1488.65	1473.57	1465.92	1473.16	1458.47	1441.37	1422.82
24-Jul	1463.51	1465.92	1470.75	1462.75	1437.10	1402.81	1382.81
25-Jul	1501.91	1503.73	1488.65	1465.92	1473.16	1467.02	1458.47
26-Jul	1478.14	1501.91	1498.71	1468.54	1470.75	1474.36	1467.02
27-Jul	1442.48	1466.25	1513.79	1483.62	1467.13	1470.75	1474.36
28-Jul	1442.48	1466.25	1513.79	1483.62	1467.13	1470.75	1474.36
29-Jul	1430.60	1454.37	1501.91	1483.62	1465.92	1470.75	1473.16
30-Jul	1442.48	1466.25	1513.79	1483.62	1467.13	1470.75	1474.36
31-Jul	1442.48	1466.25	1513.79	1483.62	1467.13	1470.75	1474.36
1-Aug	1442.48	1466.25	1513.79	1483.62	1467.13	1470.75	1474.36
2-Aug	1442.48	1466.25	1513.79	1483.62	1467.13	1470.75	1474.36
3-Aug	1442.48	1466.25	1513.79	1483.62	1467.13	1470.75	1474.36
4-Aug	1442.48	1466.25	1513.79	1483.62	1467.13	1470.75	1474.36
5-Aug	1442.48	1466.25	1513.79	1483.62	1467.13	1470.75	1474.36
6-Aug	1430.60	1454.37	1501.91	1483.62	1465.92	1470.75	1473.16
7-Aug	1430.60	1454.37	1501.91	1483.62	1465.92	1470.75	1473.16
8-Aug	1430.60	1454.37	1501.91	1483.62	1465.92	1470.75	1473.16
9-Aug	1442.48	1466.25	1513.79	1483.62	1467.13	1470.75	1474.36
10-Aug	1442.48	1466.25	1513.79	1483.62	1467.13	1470.75	1474.36
11-Aug	1418.71	1454.37	1490.02	1488.65	1464.72	1469.54	1471.95
12-Aug	1406.83	1430.60	1478.14	1498.71	1463.51	1467.13	1470.75
13-Aug	1418.71	1454.37	1490.02	1488.65	1464.72	1469.54	1471.95
14-Aug	1501.91	1503.73	1488.65	1465.92	1473.16	1467.02	1458.47
15-Aug	1488.65	1473.57	1465.92	1473.16	1458.47	1441.37	1422.82
16-Aug	1473.57	1463.51	1468.33	1475.57	1445.65	1432.82	1402.81
17-Aug	1513.79	1503.73	1483.62	1465.92	1474.36	1462.75	1454.20
18-Aug	1490.02	1513.79	1493.68	1463.51	1470.75	1475.57	1462.75
19-Aug	1466.25	1490.02	1503.73	1468.54	1469.54	1474.36	1471.30
20-Aug	1508.76	1493.68	1473.57	1468.33	1475.57	1458.47	1445.65
21-Aug	1464.72	1468.33	1473.16	1458.47	1432.82	1392.81	1362.80
22-Aug	1468.54	1465.92	1469.54	1467.02	1441.37	1412.81	1392.81
23-Aug	1312.59	1281.51	1240.06	1201.38	1163.11	1138.16	1170.55
24-Aug	1281.51	1260.78	1227.17	1188.48	1144.40	1159.75	1181.16
25-Aug	1233.61	1214.27	1194.93	1150.64	1181.34	1180.63	1180.27
26-Aug	1339.32	1342.59	1312.59	1250.42	1207.83	1182.04	1163.11
27-Aug	1402.81	1372.80	1342.79	1339.32	1322.96	1281.51	1260.78

Table A34, continued. Summer 1999 allocation scenario time series results for the pool – cover guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	1175.59	1156.88	1148.96	1180.81	1179.74	1174.65	1169.74
29-Aug	1179.13	1153.23	1111.73	1043.62	1046.81	1049.51	1051.15
30-Aug	1173.02	1169.74	1163.20	1173.82	1139.40	1097.90	1056.39
31-Aug	1201.38	1188.48	1163.11	1159.75	1180.45	1179.92	1177.92
1-Sep	1342.59	1333.32	1291.87	1233.61	1188.48	1169.35	1150.64
2-Sep	1382.81	1362.80	1333.88	1340.41	1302.23	1271.15	1240.06
3-Sep	1432.82	1402.81	1372.80	1336.06	1342.59	1312.59	1291.87
4-Sep	1441.37	1422.82	1382.81	1333.88	1340.41	1333.32	1302.23
5-Sep	1180.81	1180.45	1179.74	1171.38	1166.74	1172.05	1177.36
6-Sep	948.08	949.08	951.08	954.58	957.58	959.57	960.57
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10-Sep	780.40	777.95	775.49	769.77	764.87	761.59	759.96
11-Sep	976.07	977.57	979.57	982.57	979.28	972.90	968.12
12-Sep	934.50	934.25	935.08	938.08	941.08	943.08	944.58
13-Sep	962.60	958.96	954.10	946.81	939.52	938.06	937.80
14-Sep	1047.05	1033.54	1015.52	1001.20	989.42	981.56	977.17
15-Sep	1044.68	1045.75	1047.87	1052.78	1042.55	1024.53	1015.52
16-Sep	976.09	972.90	966.52	956.95	945.79	941.00	936.21
17-Sep	851.67	848.48	842.10	830.93	822.91	819.64	818.01
18-Sep	931.43	926.64	920.26	910.69	901.12	894.74	889.95
19-Sep	934.76	934.50	934.16	936.58	939.58	941.58	943.08
20-Sep	938.31	938.06	937.72	937.21	936.70	936.36	936.11
21-Sep	937.80	937.63	937.29	936.70	936.20	935.86	935.69
22-Sep	920.26	917.07	910.69	901.12	891.55	885.17	880.38
23-Sep	775.49	773.86	770.59	765.68	759.96	757.51	755.05
24-Sep	925.05	920.26	915.48	904.31	894.74	888.36	885.17
25-Sep	954.08	955.58	957.58	960.57	963.57	965.57	967.07
26-Sep	935.94	935.69	935.35	934.84	934.33	934.58	936.08
27-Sep	950.45	948.03	943.17	938.14	937.55	937.29	937.04
28-Sep	977.17	974.74	969.88	961.38	954.10	949.24	946.81
29-Sep	965.03	961.38	957.74	949.24	941.95	938.23	938.06
30-Sep	804.93	803.29	800.02	794.30	789.39	786.12	784.49

Table A35. Summer 1999 allocation scenario time series results for the algae – midge guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	4891.36	4867.27	6291.81	7672.28	7725.35	7781.69	7819.94
2-Jun	7331.38	6942.13	6141.10	4931.52	4883.33	5336.76	6291.81
3-Jun	8729.49	8789.06	8868.50	7915.25	6741.87	5940.84	5340.07
4-Jun	9297.67	8729.49	8808.92	8499.11	7331.38	6541.61	5940.84
5-Jun	8868.50	8693.74	7915.25	6741.87	5340.07	4931.52	4907.43
6-Jun	8808.92	8868.50	8304.49	7136.75	5940.84	5139.81	4923.49
7-Jun	8789.06	8828.78	8693.74	7526.00	6141.10	5540.32	4939.55
8-Jun	8729.49	8789.06	8868.50	7915.25	6741.87	5940.84	5340.07
9-Jun	15815.39	13552.97	11121.37	8729.49	8848.64	8499.11	8109.87
10-Jun	16862.02	14768.77	12337.17	8689.77	8828.78	8888.36	8304.49
11-Jun	24188.39	21048.51	16862.02	12337.17	8689.77	8769.21	8828.78
12-Jun	26869.77	25235.01	21048.51	14768.77	10513.47	8689.77	8749.35
13-Jun	26869.77	25235.01	21048.51	14768.77	10513.47	8689.77	8749.35
14-Jun	26869.77	25235.01	21048.51	14768.77	10513.47	8689.77	8749.35
15-Jun	26869.77	25235.01	21048.51	14768.77	10513.47	8689.77	8749.35
16-Jun	26869.77	25235.01	21048.51	14768.77	10513.47	8689.77	8749.35
17-Jun	21048.51	18955.27	14768.77	11121.37	8749.35	8828.78	8868.50
18-Jun	20001.89	17908.64	14160.87	10513.47	8769.21	8828.78	8888.36
19-Jun	26869.77	24188.39	20001.89	14160.87	10513.47	8709.63	8769.21
20-Jun	27687.15	26052.39	22095.14	15815.39	11121.37	8689.77	8729.49
21-Jun	27687.15	26052.39	22095.14	15815.39	11121.37	8689.77	8729.49
22-Jun	28504.53	26052.39	23141.76	15815.39	11729.27	9297.67	8709.63
23-Jun	30139.29	28504.53	25235.01	18955.27	12945.07	11121.37	9297.67
24-Jun	32591.43	30139.29	26869.77	21048.51	14768.77	12337.17	10513.47
25-Jun	32591.43	30139.29	26869.77	21048.51	14768.77	12337.17	10513.47
26-Jun	31774.05	29321.91	26869.77	20001.89	14160.87	11729.27	10513.47
27-Jun	30139.29	28504.53	25235.01	18955.27	12945.07	11121.37	9297.67
28-Jun	26869.77	24188.39	20001.89	14160.87	10513.47	8709.63	8769.21
29-Jun	26869.77	25235.01	21048.51	14768.77	10513.47	8689.77	8749.35
30-Jun	26869.77	25235.01	21048.51	14768.77	10513.47	8689.77	8749.35
1-Jul	26869.77	25235.01	21048.51	14768.77	10513.47	8689.77	8749.35
2-Jul	26869.77	25235.01	21048.51	14768.77	10513.47	8689.77	8749.35
3-Jul	31774.05	29321.91	26869.77	20001.89	14160.87	11729.27	10513.47
4-Jul	41428.18	38420.91	35413.65	29321.91	24188.39	20001.89	17908.64
5-Jul	43433.02	41428.18	37418.49	31774.05	26052.39	22095.14	20001.89
6-Jul	41428.18	38420.91	35413.65	29321.91	24188.39	20001.89	17908.64
7-Jul	35413.65	32591.43	29321.91	24188.39	17908.64	14160.87	12337.17
8-Jul	37418.49	35413.65	31774.05	26052.39	20001.89	15815.39	14160.87
9-Jul	40425.76	38420.91	34411.23	28504.53	23141.76	18955.27	16862.02
10-Jul	40425.76	38420.91	34411.23	28504.53	23141.76	18955.27	16862.02
11-Jul	42430.60	39423.34	35413.65	30139.29	25235.01	21048.51	17908.64
12-Jul	42430.60	39423.34	35413.65	30139.29	25235.01	21048.51	17908.64
13-Jul	42430.60	39423.34	35413.65	30139.29	25235.01	21048.51	17908.64
14-Jul	41428.18	38420.91	35413.65	29321.91	24188.39	20001.89	17908.64

Table A35, continued. Summer 1999 allocation scenario time series results for the algae – midge guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	42430.60	39423.34	35413.65	30139.29	25235.01	21048.51	17908.64
16-Jul	42430.60	39423.34	35413.65	30139.29	25235.01	21048.51	17908.64
17-Jul	42430.60	40425.76	36416.07	30956.67	25235.01	22095.14	18955.27
18-Jul	42430.60	40425.76	36416.07	30956.67	25235.01	22095.14	18955.27
19-Jul	43433.02	41428.18	37418.49	31774.05	26052.39	22095.14	20001.89
20-Jul	43433.02	41428.18	37418.49	31774.05	26052.39	22095.14	20001.89
21-Jul	43433.02	41428.18	37418.49	31774.05	26052.39	22095.14	20001.89
22-Jul	39423.34	37418.49	33408.81	28504.53	22095.14	18955.27	15815.39
23-Jul	29321.91	26869.77	23141.76	16862.02	12337.17	9905.57	8709.63
24-Jul	25235.01	23141.76	18955.27	12945.07	9297.67	8749.35	8789.06
25-Jul	34411.23	31774.05	29321.91	23141.76	16862.02	13552.97	12337.17
26-Jul	36416.07	34411.23	30956.67	26052.39	18955.27	15815.39	13552.97
27-Jul	39423.34	37418.49	33408.81	28504.53	22095.14	18955.27	15815.39
28-Jul	39423.34	37418.49	33408.81	28504.53	22095.14	18955.27	15815.39
29-Jul	40425.76	38420.91	34411.23	28504.53	23141.76	18955.27	16862.02
30-Jul	39423.34	37418.49	33408.81	28504.53	22095.14	18955.27	15815.39
31-Jul	39423.34	37418.49	33408.81	28504.53	22095.14	18955.27	15815.39
1-Aug	39423.34	37418.49	33408.81	28504.53	22095.14	18955.27	15815.39
2-Aug	39423.34	37418.49	33408.81	28504.53	22095.14	18955.27	15815.39
3-Aug	39423.34	37418.49	33408.81	28504.53	22095.14	18955.27	15815.39
4-Aug	39423.34	37418.49	33408.81	28504.53	22095.14	18955.27	15815.39
5-Aug	39423.34	37418.49	33408.81	28504.53	22095.14	18955.27	15815.39
6-Aug	40425.76	38420.91	34411.23	28504.53	23141.76	18955.27	16862.02
7-Aug	40425.76	38420.91	34411.23	28504.53	23141.76	18955.27	16862.02
8-Aug	40425.76	38420.91	34411.23	28504.53	23141.76	18955.27	16862.02
9-Aug	39423.34	37418.49	33408.81	28504.53	22095.14	18955.27	15815.39
10-Aug	39423.34	37418.49	33408.81	28504.53	22095.14	18955.27	15815.39
11-Aug	41428.18	38420.91	35413.65	29321.91	24188.39	20001.89	17908.64
12-Aug	42430.60	40425.76	36416.07	30956.67	25235.01	22095.14	18955.27
13-Aug	41428.18	38420.91	35413.65	29321.91	24188.39	20001.89	17908.64
14-Aug	34411.23	31774.05	29321.91	23141.76	16862.02	13552.97	12337.17
15-Aug	29321.91	26869.77	23141.76	16862.02	12337.17	9905.57	8709.63
16-Aug	26869.77	25235.01	21048.51	14768.77	10513.47	8689.77	8749.35
17-Aug	33408.81	31774.05	28504.53	23141.76	15815.39	12945.07	11729.27
18-Aug	35413.65	33408.81	30139.29	25235.01	18955.27	14768.77	12945.07
19-Aug	37418.49	35413.65	31774.05	26052.39	20001.89	15815.39	14160.87
20-Aug	32591.43	30139.29	26869.77	21048.51	14768.77	12337.17	10513.47
21-Aug	24188.39	21048.51	16862.02	12337.17	8689.77	8769.21	8828.78
22-Aug	26052.39	23141.76	20001.89	13552.97	9905.57	8729.49	8769.21
23-Aug	6341.36	5740.58	4939.55	4891.36	5814.29	7724.38	7672.28
24-Aug	5740.58	5340.07	4923.49	4875.30	7246.86	7689.65	7669.00
25-Aug	4931.52	4907.43	4883.33	6769.33	7654.91	7711.26	7739.43
26-Aug	7720.62	7136.75	6341.36	5139.81	4899.40	4867.27	5814.29
27-Aug	8749.35	8808.92	8868.50	7720.62	6541.61	5740.58	5340.07

Table A35, continued. Summer 1999 allocation scenario time series results for the algae – midge guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	4859.24	6291.81	7707.01	7697.17	7781.69	7832.02	7868.26
29-Aug	8028.28	8028.18	8009.42	8001.80	8072.73	7505.46	6914.54
30-Aug	7844.10	7868.26	7916.58	7991.05	8021.93	8003.17	7984.40
31-Aug	4891.36	4875.30	5814.29	7689.65	7725.35	7767.61	7807.86
1-Sep	7136.75	6741.87	5940.84	4931.52	4875.30	5336.76	6769.33
2-Sep	8789.06	8828.78	8693.74	7526.00	6141.10	5540.32	4939.55
3-Sep	8689.77	8749.35	8808.92	8304.49	7136.75	6341.36	5940.84
4-Sep	9905.57	8709.63	8789.06	8693.74	7526.00	6741.87	6141.10
5-Sep	7697.17	7725.35	7781.69	7856.18	7941.40	7978.64	8015.87
6-Sep	2557.33	2528.77	2471.63	2371.64	2285.93	2228.79	2200.22
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10-Sep	1492.57	1494.49	1496.41	1500.90	1504.74	1507.30	1508.59
11-Sep	1757.40	1714.55	1657.41	1571.70	1526.72	1523.89	1521.76
12-Sep	3008.42	2977.75	2928.73	2843.02	2757.32	2700.18	2657.33
13-Sep	4128.56	4029.55	3897.52	3699.49	3501.46	3437.78	3407.11
14-Sep	5168.22	5207.89	5260.79	5060.46	4804.19	4633.35	4524.63
15-Sep	8025.44	8049.09	8096.38	6323.61	5181.44	5234.34	5260.79
16-Sep	1525.31	1523.89	1521.05	1516.80	1511.84	1509.71	1507.59
17-Sep	1470.02	1468.60	1465.77	1460.81	1459.25	1461.81	1463.10
18-Sep	1505.46	1503.33	1500.50	1496.25	1491.99	1489.16	1487.03
19-Sep	3039.08	3008.42	2967.52	2885.88	2800.17	2743.03	2700.18
20-Sep	3468.45	3437.78	3396.89	3335.55	3274.21	3233.32	3202.65
21-Sep	3407.11	3386.67	3345.77	3274.21	3212.88	3171.98	3151.54
22-Sep	1500.50	1499.08	1496.25	1491.99	1487.74	1484.90	1482.78
23-Sep	1496.41	1497.69	1500.26	1504.10	1508.59	1510.51	1512.43
24-Sep	1502.62	1500.50	1498.37	1493.41	1489.16	1486.32	1484.90
25-Sep	2385.92	2343.07	2285.93	2200.22	2114.52	2057.38	2014.52
26-Sep	3182.21	3151.54	3110.65	3049.31	2987.97	2943.02	2900.16
27-Sep	3798.51	3732.50	3600.47	3448.00	3376.44	3345.77	3315.11
28-Sep	4524.63	4458.62	4326.60	4095.56	3897.52	3765.50	3699.49
29-Sep	4194.57	4095.56	3996.54	3765.50	3567.47	3458.23	3437.78
30-Sep	1473.35	1474.63	1477.19	1481.68	1485.52	1488.08	1489.36

Table A36. Summer 2002 allocation scenario time series results for the fast generalist guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	139.23	138.68	138.14	136.87	135.77	135.05	134.68
2-Jun	144.86	144.32	143.77	142.50	141.41	140.68	140.32
3-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
4-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
5-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
6-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
7-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
8-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
9-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
10-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
11-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
12-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
13-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
14-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
15-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
16-Jun	145.41	145.41	145.41	145.41	144.32	143.59	143.23
17-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
18-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
19-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
20-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
21-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
22-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
23-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
24-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
25-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
26-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
27-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
28-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
29-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
30-Jun	145.41	145.41	145.41	145.41	145.41	145.41	145.41
1-Jul	145.41	145.41	145.41	145.41	145.41	145.41	145.41
2-Jul	145.41	145.41	145.41	145.41	145.41	145.41	145.41
3-Jul	145.41	145.41	145.41	145.41	145.41	145.41	145.41
4-Jul	145.41	145.41	145.41	145.41	145.41	145.41	145.41
5-Jul	145.41	145.41	145.41	145.41	145.41	145.41	145.41
6-Jul	136.32	139.96	145.41	145.41	145.41	145.41	145.41
7-Jul	121.78	127.23	132.68	145.41	145.41	145.41	145.41
8-Jul	110.88	114.51	121.78	134.50	145.41	145.41	145.41
9-Jul	109.06	109.06	114.51	125.41	136.32	143.59	145.41
10-Jul	109.06	109.06	109.06	118.15	129.05	136.32	141.77
11-Jul	109.06	109.06	109.06	110.88	121.78	129.05	134.50
12-Jul	109.06	109.06	109.06	109.06	119.96	127.23	130.87
13-Jul	121.78	127.23	132.68	145.41	145.41	145.41	145.41
14-Jul	145.41	145.41	145.41	145.41	145.41	145.41	145.41

Table A36, continued. Summer 2002 allocation scenario time series results for the fast generalist guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	145.41	145.41	145.41	145.41	145.41	145.41	145.41
16-Jul	143.59	145.41	145.41	145.41	145.41	145.41	145.41
17-Jul	145.41	145.41	145.41	145.41	145.41	145.41	145.41
18-Jul	145.41	145.41	145.41	145.41	145.41	145.41	145.41
19-Jul	138.14	143.59	145.41	145.41	145.41	145.41	145.41
20-Jul	119.96	123.60	130.87	141.77	145.41	145.41	145.41
21-Jul	109.06	114.51	119.96	132.68	143.59	145.41	145.41
22-Jul	109.06	110.88	118.15	129.05	141.77	145.41	145.41
23-Jul	109.06	109.06	114.51	127.23	138.14	145.41	145.41
24-Jul	109.06	109.06	114.51	125.41	136.32	143.59	145.41
25-Jul	109.06	109.06	116.33	127.23	139.96	145.41	145.41
26-Jul	109.06	109.06	114.51	125.41	136.32	143.59	145.41
27-Jul	130.87	134.50	141.77	145.41	145.41	145.41	145.41
28-Jul	145.41	145.41	145.41	145.41	145.41	145.41	145.41
29-Jul	145.41	145.41	145.41	145.41	145.41	145.41	145.41
30-Jul	145.41	145.41	145.41	145.41	145.41	145.41	145.41
31-Jul	145.41	145.41	145.41	145.41	145.41	145.41	145.41
1-Aug	145.41	145.41	145.41	145.41	145.41	145.41	145.41
2-Aug	109.06	112.69	119.96	130.87	141.77	145.41	145.41
3-Aug	109.06	109.06	109.06	110.88	121.78	129.05	134.50
4-Aug	109.06	109.06	109.06	109.06	114.51	121.78	125.41
5-Aug	109.06	109.06	109.06	110.88	121.78	129.05	134.50
6-Aug	121.78	127.23	132.68	145.41	145.41	145.41	145.41
7-Aug	114.51	119.96	127.23	138.14	145.41	145.41	145.41
8-Aug	109.06	109.06	109.06	109.06	116.33	121.78	127.23
9-Aug	112.69	111.14	109.58	109.06	109.06	109.06	109.06
10-Aug	111.34	113.21	111.66	109.06	109.06	109.06	109.06
11-Aug	99.71	108.43	113.21	110.10	109.06	109.06	109.06
12-Aug	96.80	102.62	114.25	111.14	109.06	109.06	109.06
13-Aug	116.33	121.78	127.23	139.96	145.41	145.41	145.41
14-Aug	109.06	109.06	109.06	114.51	125.41	132.68	136.32
15-Aug	109.06	109.06	109.06	109.06	110.88	118.15	123.60
16-Aug	109.06	114.51	119.96	132.68	143.59	145.41	145.41
17-Aug	109.06	109.06	109.06	109.06	112.69	119.96	123.60
18-Aug	109.58	109.06	109.06	109.06	109.06	112.69	116.33
19-Aug	111.66	110.10	109.06	109.06	109.06	109.06	110.88
20-Aug	112.17	111.14	109.06	109.06	109.06	109.06	109.06
21-Aug	112.69	111.14	109.58	109.06	109.06	109.06	109.06
22-Aug	113.21	111.66	109.58	109.06	109.06	109.06	109.06
23-Aug	113.73	112.17	110.10	109.06	109.06	109.06	109.06
24-Aug	113.21	111.66	109.58	109.06	109.06	109.06	109.06
25-Aug	112.17	111.14	109.06	109.06	109.06	109.06	109.06
26-Aug	112.17	111.14	109.06	109.06	109.06	109.06	109.06
27-Aug	112.17	111.14	109.06	109.06	109.06	109.06	109.06

Table A36, continued. Summer 2002 allocation scenario time series results for the fast generalist guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	110.10	109.06	109.06	109.06	109.06	109.06	114.51
29-Aug	109.06	109.06	114.51	125.41	136.32	143.59	145.41
30-Aug	109.06	109.06	109.06	110.88	121.78	129.05	134.50
31-Aug	109.06	109.06	109.06	109.06	109.06	116.33	119.96
1-Sep	111.14	109.58	109.06	109.06	109.06	109.06	110.88
2-Sep	114.25	113.21	111.14	109.06	109.06	109.06	109.06
3-Sep	102.62	111.34	113.21	109.58	109.06	109.06	109.06
4-Sep	99.71	108.43	113.21	110.10	109.06	109.06	109.06
5-Sep	90.99	99.71	108.43	111.66	109.06	109.06	109.06
6-Sep	80.44	88.08	99.71	113.73	110.62	109.06	109.06
7-Sep	96.80	102.62	114.25	111.14	109.06	109.06	109.06
8-Sep	108.43	113.73	111.66	109.06	109.06	109.06	109.06
9-Sep	105.53	111.34	112.69	109.58	109.06	109.06	109.06
10-Sep	99.71	108.43	113.21	110.10	109.06	109.06	109.06
11-Sep	93.89	99.71	111.34	111.14	109.06	109.06	109.06
12-Sep	88.08	93.89	105.53	112.69	109.06	109.06	109.06
13-Sep	80.44	88.08	99.71	113.73	110.62	109.06	109.06
14-Sep	85.17	90.99	102.62	113.21	109.58	109.06	109.06
15-Sep	93.89	99.71	111.34	111.14	109.06	109.06	109.06
16-Sep	105.53	111.34	112.69	109.58	109.06	109.06	109.06
17-Sep	102.62	111.34	113.21	109.58	109.06	109.06	109.06
18-Sep	90.99	99.71	108.43	111.66	109.06	109.06	109.06
19-Sep	93.89	99.71	111.34	111.14	109.06	109.06	109.06
20-Sep	93.89	99.71	111.34	111.14	109.06	109.06	109.06
21-Sep	109.06	109.06	109.06	110.88	121.78	129.05	134.50
22-Sep	109.06	109.06	110.88	121.78	134.50	139.96	145.41
23-Sep	109.06	109.06	109.06	116.33	129.05	134.50	139.96
24-Sep	109.06	109.06	109.06	110.88	121.78	129.05	134.50
25-Sep	143.59	145.41	145.41	145.41	145.41	145.41	145.41
26-Sep	145.41	145.41	145.41	145.41	145.41	145.41	145.41
27-Sep	145.41	145.41	145.41	145.41	145.41	145.41	145.41
28-Sep	60.68	57.63	53.57	47.48	41.38	37.32	34.27
29-Sep	119.23	118.14	116.69	114.51	112.33	110.87	109.78
30-Sep	145.41	145.41	145.41	145.41	145.41	145.41	145.41

Table A37. Summer 2002 allocation scenario time series results for the pool – run guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	9658.44	9588.94	9519.43	9357.26	9218.25	9125.57	9079.24
2-Jun	10376.66	10307.15	10237.65	10075.47	9936.46	9843.79	9797.45
3-Jun	11014.80	10966.06	10901.07	10803.59	10706.11	10641.12	10608.63
4-Jun	11454.25	11419.71	11373.65	11304.56	11226.01	11161.02	11112.28
5-Jun	11408.20	11373.65	11327.59	11258.50	11161.02	11096.03	11047.29
6-Jun	11193.51	11161.02	11096.03	10998.55	10884.82	10836.08	10787.34
7-Jun	11258.50	11209.76	11144.77	11047.29	10949.81	10884.82	10836.08
8-Jun	11161.02	11128.53	11063.54	10949.81	10852.33	10787.34	10754.85
9-Jun	11824.18	11789.34	11719.68	11626.98	11546.38	11511.83	11477.29
10-Jun	11928.68	11928.68	11928.68	11841.60	11737.09	11667.43	11626.98
11-Jun	12331.39	12163.92	12059.37	11928.68	11928.68	11911.26	11859.01
12-Jun	12992.80	12928.73	12684.70	12260.72	12033.23	11928.68	11928.68
13-Jun	12614.04	12472.71	12190.06	12033.23	11928.68	11928.68	11928.68
14-Jun	11454.25	11431.22	11385.17	11316.08	11226.01	11177.27	11128.53
15-Jun	10982.30	10949.81	10884.82	10787.34	10673.62	10608.63	10576.13
16-Jun	10657.37	10624.88	10559.89	10446.16	10307.15	10214.48	10168.14
17-Jun	11824.18	11771.93	11702.26	11615.46	11546.38	11500.31	11465.77
18-Jun	11928.68	11928.68	11928.68	11876.43	11771.93	11702.26	11667.43
19-Jun	12543.38	12402.05	12163.92	12007.09	11928.68	11928.68	11928.68
20-Jun	13088.91	13024.84	12896.69	12472.71	12111.65	12033.23	11954.82
21-Jun	11928.68	11928.68	11928.68	11824.18	11719.68	11650.01	11626.98
22-Jun	12614.04	12472.71	12190.06	12033.23	11928.68	11928.68	11928.68
23-Jun	13406.30	13311.68	13152.99	12928.73	12543.38	12260.72	12163.92
24-Jun	13679.25	13684.71	13642.85	13358.99	13120.95	12992.80	12896.69
25-Jun	13710.21	13684.72	13677.43	13688.34	13406.30	13264.37	13152.99
26-Jun	13799.40	13761.17	13710.21	13677.43	13688.34	13548.23	13406.30
27-Jun	13829.94	13786.66	13735.69	13673.80	13686.52	13595.54	13500.92
28-Jun	11824.18	11789.34	11719.68	11626.98	11546.38	11511.83	11477.29
29-Jun	11911.26	11876.43	11806.76	11684.84	11603.95	11557.89	11534.86
30-Jun	11226.01	11177.27	11128.53	11014.80	10917.32	10852.33	10819.84
1-Jul	13681.07	13686.52	13642.85	13311.68	13088.91	12960.76	12896.69
2-Jul	12992.80	12928.73	12684.70	12260.72	12033.23	11928.68	11928.68
3-Jul	13185.02	13120.95	12992.80	12684.70	12190.06	12111.65	12033.23
4-Jul	13710.21	13684.72	13677.43	13688.34	13406.30	13264.37	13152.99
5-Jul	14146.34	14127.12	14068.84	13860.49	13748.43	13697.46	13671.98
6-Jul	14098.15	14136.65	14184.78	14127.12	13980.48	13860.49	13799.40
7-Jul	13920.15	14001.91	14059.65	14194.39	14136.73	14098.29	14039.38
8-Jul	13756.64	13811.15	13920.15	14078.90	14194.39	14155.95	14136.73
9-Jul	13646.40	13708.64	13811.15	13974.66	14098.15	14175.14	14175.17
10-Jul	13563.41	13625.65	13708.64	13865.65	14021.16	14098.15	14155.89
11-Jul	13348.89	13542.66	13625.65	13756.64	13920.15	14021.16	14078.90
12-Jul	13262.39	13435.40	13584.15	13729.39	13892.90	14001.91	14040.41
13-Jul	13920.15	14001.91	14059.65	14194.39	14136.73	14098.29	14039.38
14-Jul	13710.21	13684.72	13677.43	13688.34	13406.30	13264.37	13152.99

Table A37, continued. Summer 2002 allocation scenario time series results for the pool – run guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	13710.21	13671.98	13679.25	13690.16	13406.30	13217.06	13120.95
16-Jul	14175.14	14184.78	14146.34	14068.84	13860.49	13786.66	13748.43
17-Jul	13710.21	13671.98	13679.25	13690.16	13406.30	13217.06	13120.95
18-Jul	14039.38	13980.48	13860.49	13735.69	13673.80	13681.07	13684.71
19-Jul	14117.40	14175.14	14165.56	14107.90	13951.02	13829.94	13773.92
20-Jul	13892.90	13947.41	14040.41	14155.89	14146.34	14117.51	14068.84
21-Jul	13729.39	13811.15	13892.90	14059.65	14175.14	14165.56	14146.34
22-Jul	13708.64	13756.64	13865.65	14021.16	14155.89	14184.78	14155.95
23-Jul	13667.15	13729.39	13811.15	14001.91	14117.40	14194.39	14175.17
24-Jul	13646.40	13708.64	13811.15	13974.66	14098.15	14175.14	14175.17
25-Jul	13687.89	13729.39	13838.40	14001.91	14136.65	14184.78	14165.56
26-Jul	13646.40	13708.64	13811.15	13974.66	14098.15	14175.14	14175.17
27-Jul	14040.41	14078.90	14155.89	14155.95	14068.84	13951.02	13891.03
28-Jul	13951.02	13860.49	13786.66	13697.46	13679.25	13686.52	13690.16
29-Jul	13311.68	13185.02	13056.88	12826.03	12402.05	12163.92	12085.51
30-Jul	12992.80	12928.73	12684.70	12260.72	12033.23	11928.68	11928.68
31-Jul	13722.95	13697.46	13675.62	13686.52	13453.61	13264.37	13185.02
1-Aug	14127.12	14098.29	13980.48	13799.40	13722.95	13671.98	13677.43
2-Aug	13708.64	13783.89	13892.90	14040.41	14155.89	14175.17	14146.34
3-Aug	13348.89	13542.66	13625.65	13756.64	13920.15	14021.16	14078.90
4-Aug	13002.86	13175.88	13521.91	13646.40	13811.15	13920.15	13974.66
5-Aug	13348.89	13542.66	13625.65	13756.64	13920.15	14021.16	14078.90
6-Aug	13920.15	14001.91	14059.65	14194.39	14136.73	14098.29	14039.38
7-Aug	13811.15	13892.90	14001.91	14117.40	14175.17	14136.73	14107.90
8-Aug	13089.37	13262.39	13542.66	13667.15	13838.40	13920.15	14001.91
9-Aug	12177.68	12383.03	12588.38	13175.88	13563.41	13646.40	13687.89
10-Aug	11879.21	12109.23	12314.58	12829.85	13348.89	13563.41	13604.90
11-Aug	11506.75	11786.10	12109.23	12519.93	13002.86	13348.89	13542.66
12-Aug	11413.63	11599.87	11972.33	12383.03	12916.35	13175.88	13435.40
13-Aug	13838.40	13920.15	14001.91	14136.65	14165.56	14127.12	14107.90
14-Aug	13521.91	13584.15	13646.40	13811.15	13974.66	14059.65	14098.15
15-Aug	12829.85	13089.37	13435.40	13625.65	13756.64	13865.65	13947.41
16-Aug	13729.39	13811.15	13892.90	14059.65	14175.14	14165.56	14146.34
17-Aug	12916.35	13175.88	13435.40	13646.40	13783.89	13892.90	13947.41
18-Aug	12588.38	12829.85	13175.88	13563.41	13687.89	13783.89	13838.40
19-Aug	12314.58	12519.93	12829.85	13348.89	13604.90	13687.89	13756.64
20-Aug	12246.13	12383.03	12656.83	13175.88	13584.15	13667.15	13708.64
21-Aug	12177.68	12383.03	12588.38	13175.88	13563.41	13646.40	13687.89
22-Aug	12109.23	12314.58	12588.38	13089.37	13542.66	13625.65	13687.89
23-Aug	12040.78	12246.13	12519.93	13002.86	13521.91	13604.90	13667.15
24-Aug	12109.23	12314.58	12588.38	13089.37	13542.66	13625.65	13687.89
25-Aug	12246.13	12383.03	12656.83	13175.88	13584.15	13667.15	13708.64
26-Aug	12246.13	12383.03	12656.83	13175.88	13584.15	13667.15	13708.64
27-Aug	12246.13	12383.03	12656.83	13175.88	13584.15	13667.15	13708.64

Table A37, continued. Summer 2002 allocation scenario time series results for the pool – run guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	12519.93	12656.83	13002.86	13521.91	13667.15	13729.39	13811.15
29-Aug	13646.40	13708.64	13811.15	13974.66	14098.15	14175.14	14175.17
30-Aug	13348.89	13542.66	13625.65	13756.64	13920.15	14021.16	14078.90
31-Aug	12743.34	12916.35	13262.39	13584.15	13729.39	13838.40	13892.90
1-Sep	12383.03	12588.38	12829.85	13435.40	13625.65	13708.64	13756.64
2-Sep	11972.33	12109.23	12383.03	12916.35	13435.40	13584.15	13625.65
3-Sep	11599.87	11879.21	12109.23	12588.38	13089.37	13435.40	13542.66
4-Sep	11506.75	11786.10	12109.23	12519.93	13002.86	13348.89	13542.66
5-Sep	11227.40	11506.75	11786.10	12314.58	12743.34	13089.37	13262.39
6-Sep	10688.42	11134.29	11506.75	12040.78	12451.48	12743.34	13002.86
7-Sep	11413.63	11599.87	11972.33	12383.03	12916.35	13175.88	13435.40
8-Sep	11786.10	12040.78	12314.58	12743.34	13262.39	13542.66	13604.90
9-Sep	11692.98	11879.21	12177.68	12588.38	13175.88	13521.91	13563.41
10-Sep	11506.75	11786.10	12109.23	12519.93	13002.86	13348.89	13542.66
11-Sep	11320.52	11506.75	11879.21	12383.03	12829.85	13175.88	13348.89
12-Sep	11134.29	11320.52	11692.98	12177.68	12656.83	12916.35	13175.88
13-Sep	10688.42	11134.29	11506.75	12040.78	12451.48	12743.34	13002.86
14-Sep	11041.17	11227.40	11599.87	12109.23	12588.38	12916.35	13089.37
15-Sep	11320.52	11506.75	11879.21	12383.03	12829.85	13175.88	13348.89
16-Sep	11692.98	11879.21	12177.68	12588.38	13175.88	13521.91	13563.41
17-Sep	11599.87	11879.21	12109.23	12588.38	13089.37	13435.40	13542.66
18-Sep	11227.40	11506.75	11786.10	12314.58	12743.34	13089.37	13262.39
19-Sep	11320.52	11506.75	11879.21	12383.03	12829.85	13175.88	13348.89
20-Sep	11320.52	11506.75	11879.21	12383.03	12829.85	13175.88	13348.89
21-Sep	13348.89	13542.66	13625.65	13756.64	13920.15	14021.16	14078.90
22-Sep	13625.65	13667.15	13756.64	13920.15	14078.90	14136.65	14194.39
23-Sep	13563.41	13604.90	13687.89	13838.40	14021.16	14078.90	14136.65
24-Sep	13348.89	13542.66	13625.65	13756.64	13920.15	14021.16	14078.90
25-Sep	14175.14	14184.78	14146.34	14068.84	13860.49	13786.66	13748.43
26-Sep	13679.25	13684.71	13642.85	13358.99	13120.95	12992.80	12896.69
27-Sep	11806.76	11754.51	11702.26	11603.95	11534.86	11488.80	11465.77
28-Sep	4691.19	4637.22	4565.25	4457.30	4349.35	4277.38	4223.40
29-Sep	7734.77	7680.97	7609.23	7501.62	7394.01	7322.27	7268.47
30-Sep	10917.32	10884.82	10819.84	10722.36	10608.63	10559.89	10511.15

Table A38. Summer 2002 allocation scenario time series results for the pool – cover guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	951.08	952.58	954.08	957.58	960.57	962.57	963.57
2-Jun	935.58	937.08	938.58	942.08	945.08	947.08	948.08
3-Jun	937.04	936.79	936.45	935.94	935.43	935.10	934.93
4-Jun	958.96	955.31	950.45	943.17	938.14	937.80	937.55
5-Jun	954.10	950.45	945.60	938.31	937.80	937.46	937.21
6-Jun	937.97	937.80	937.46	936.96	936.36	936.11	935.86
7-Jun	938.31	938.06	937.72	937.21	936.70	936.36	936.11
8-Jun	937.80	937.63	937.29	936.70	936.20	935.86	935.69
9-Jun	999.24	995.31	987.46	977.17	968.67	965.03	961.38
10-Jun	1047.05	1033.54	1015.52	1001.20	989.42	981.56	977.17
11-Jun	1046.81	1048.69	1051.97	1051.56	1024.53	1009.06	1003.17
12-Jun	1084.06	1056.39	1044.15	1047.34	1052.78	1056.06	1047.05
13-Jun	1044.68	1045.75	1047.87	1052.78	1042.55	1024.53	1015.52
14-Jun	958.96	956.53	951.67	944.38	938.14	937.89	937.63
15-Jun	936.87	936.70	936.36	935.86	935.26	934.93	934.76
16-Jun	935.18	935.01	934.67	934.08	937.08	939.08	940.08
17-Jun	999.24	993.35	985.49	975.96	968.67	963.81	960.17
18-Jun	1056.06	1042.55	1029.04	1005.13	993.35	985.49	981.56
19-Jun	1045.22	1046.28	1048.69	1053.60	1038.04	1024.53	1011.02
20-Jun	1125.56	1097.90	1042.56	1045.75	1050.33	1052.78	1055.24
21-Jun	1042.55	1029.04	1015.52	999.24	987.46	979.60	977.17
22-Jun	1044.68	1045.75	1047.87	1052.78	1042.55	1024.53	1015.52
23-Jun	1173.82	1177.36	1153.23	1056.39	1045.22	1047.34	1048.69
24-Jun	1173.02	1168.11	1164.97	1175.59	1139.40	1084.06	1042.56
25-Jun	1180.09	1179.74	1174.65	1164.84	1173.82	1179.13	1153.23
26-Jun	1181.34	1180.81	1180.09	1174.65	1164.84	1168.51	1173.82
27-Jun	1170.55	1181.16	1180.45	1177.92	1166.47	1166.74	1170.28
28-Jun	999.24	995.31	987.46	977.17	968.67	965.03	961.38
29-Jun	1009.06	1005.13	997.27	983.53	974.74	969.88	967.46
30-Jun	938.14	937.89	937.63	937.04	936.53	936.20	936.03
1-Jul	1171.38	1166.47	1164.97	1177.36	1125.56	1070.23	1042.56
2-Jul	1084.06	1056.39	1044.15	1047.34	1052.78	1056.06	1047.05
3-Jul	1167.07	1139.40	1084.06	1044.15	1047.87	1050.33	1052.78
4-Jul	1180.09	1179.74	1174.65	1164.84	1173.82	1179.13	1153.23
5-Jul	1207.83	1194.93	1169.35	1159.75	1180.63	1179.92	1179.56
6-Jul	1291.87	1271.15	1233.61	1194.93	1150.64	1159.75	1181.34
7-Jul	1340.41	1343.68	1312.59	1240.06	1201.38	1175.59	1163.11
8-Jul	1333.88	1336.06	1340.41	1302.23	1240.06	1214.27	1201.38
9-Jul	1372.80	1342.79	1336.06	1342.59	1291.87	1250.42	1227.17
10-Jul	1412.81	1382.81	1342.79	1338.24	1333.32	1291.87	1260.78
11-Jul	1441.37	1422.82	1382.81	1333.88	1340.41	1333.32	1302.23
12-Jul	1445.65	1437.10	1402.81	1332.79	1339.32	1343.68	1322.96
13-Jul	1340.41	1343.68	1312.59	1240.06	1201.38	1175.59	1163.11
14-Jul	1180.09	1179.74	1174.65	1164.84	1173.82	1179.13	1153.23

Table A38, continued. Summer 2002 allocation scenario time series results for the pool – cover guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	1180.09	1179.56	1173.02	1163.20	1173.82	1180.90	1139.40
16-Jul	1250.42	1233.61	1207.83	1169.35	1159.75	1181.16	1180.63
17-Jul	1180.09	1179.56	1173.02	1163.20	1173.82	1180.90	1139.40
18-Jul	1163.11	1150.64	1159.75	1180.45	1177.92	1171.38	1168.11
19-Jul	1281.51	1250.42	1220.72	1182.04	1144.40	1170.55	1180.98
20-Jul	1339.32	1341.50	1322.96	1260.78	1207.83	1188.48	1169.35
21-Jul	1332.79	1336.06	1339.32	1312.59	1250.42	1220.72	1207.83
22-Jul	1342.79	1333.88	1338.24	1333.32	1260.78	1233.61	1214.27
23-Jul	1362.80	1332.79	1336.06	1343.68	1281.51	1240.06	1227.17
24-Jul	1372.80	1342.79	1336.06	1342.59	1291.87	1250.42	1227.17
25-Jul	1352.80	1332.79	1337.15	1343.68	1271.15	1233.61	1220.72
26-Jul	1372.80	1342.79	1336.06	1342.59	1291.87	1250.42	1227.17
27-Jul	1322.96	1302.23	1260.78	1214.27	1169.35	1144.40	1148.96
28-Jul	1144.40	1159.75	1181.16	1179.92	1173.02	1166.47	1163.20
29-Jul	1177.36	1167.07	1111.73	1043.09	1046.28	1048.69	1051.15
30-Jul	1084.06	1056.39	1044.15	1047.34	1052.78	1056.06	1047.05
31-Jul	1180.27	1179.92	1176.29	1166.47	1172.05	1179.13	1167.07
1-Aug	1194.93	1175.59	1150.64	1181.34	1180.27	1179.56	1174.65
2-Aug	1342.79	1334.97	1339.32	1322.96	1260.78	1227.17	1207.83
3-Aug	1441.37	1422.82	1382.81	1333.88	1340.41	1333.32	1302.23
4-Aug	1458.47	1449.92	1432.82	1372.80	1336.06	1340.41	1342.59
5-Aug	1441.37	1422.82	1382.81	1333.88	1340.41	1333.32	1302.23
6-Aug	1340.41	1343.68	1312.59	1240.06	1201.38	1175.59	1163.11
7-Aug	1336.06	1339.32	1343.68	1281.51	1227.17	1201.38	1182.04
8-Aug	1454.20	1445.65	1422.82	1362.80	1337.15	1340.41	1343.68
9-Aug	1467.13	1470.75	1474.36	1449.92	1412.81	1372.80	1352.80
10-Aug	1468.54	1465.92	1469.54	1467.02	1441.37	1412.81	1392.81
11-Aug	1488.65	1473.57	1465.92	1473.16	1458.47	1441.37	1422.82
12-Aug	1493.68	1483.62	1463.51	1470.75	1462.75	1449.92	1437.10
13-Aug	1337.15	1340.41	1343.68	1271.15	1220.72	1194.93	1182.04
14-Aug	1432.82	1402.81	1372.80	1336.06	1342.59	1312.59	1291.87
15-Aug	1467.02	1454.20	1437.10	1382.81	1333.88	1338.24	1341.50
16-Aug	1332.79	1336.06	1339.32	1312.59	1250.42	1220.72	1207.83
17-Aug	1462.75	1449.92	1437.10	1372.80	1334.97	1339.32	1341.50
18-Aug	1474.36	1467.02	1449.92	1412.81	1352.80	1334.97	1337.15
19-Aug	1469.54	1473.16	1467.02	1441.37	1392.81	1352.80	1333.88
20-Aug	1468.33	1470.75	1475.57	1449.92	1402.81	1362.80	1342.79
21-Aug	1467.13	1470.75	1474.36	1449.92	1412.81	1372.80	1352.80
22-Aug	1465.92	1469.54	1474.36	1454.20	1422.82	1382.81	1352.80
23-Aug	1464.72	1468.33	1473.16	1458.47	1432.82	1392.81	1362.80
24-Aug	1465.92	1469.54	1474.36	1454.20	1422.82	1382.81	1352.80
25-Aug	1468.33	1470.75	1475.57	1449.92	1402.81	1362.80	1342.79
26-Aug	1468.33	1470.75	1475.57	1449.92	1402.81	1362.80	1342.79
27-Aug	1468.33	1470.75	1475.57	1449.92	1402.81	1362.80	1342.79

Table A38, continued. Summer 2002 allocation scenario time series results for the pool – cover guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	1473.16	1475.57	1458.47	1432.82	1362.80	1332.79	1336.06
29-Aug	1372.80	1342.79	1336.06	1342.59	1291.87	1250.42	1227.17
30-Aug	1441.37	1422.82	1382.81	1333.88	1340.41	1333.32	1302.23
31-Aug	1471.30	1462.75	1445.65	1402.81	1332.79	1337.15	1339.32
1-Sep	1470.75	1474.36	1467.02	1437.10	1382.81	1342.79	1333.88
2-Sep	1463.51	1465.92	1470.75	1462.75	1437.10	1402.81	1382.81
3-Sep	1483.62	1468.54	1465.92	1474.36	1454.20	1437.10	1422.82
4-Sep	1488.65	1473.57	1465.92	1473.16	1458.47	1441.37	1422.82
5-Sep	1503.73	1488.65	1473.57	1469.54	1471.30	1454.20	1445.65
6-Sep	1490.02	1508.76	1488.65	1464.72	1471.95	1471.30	1458.47
7-Sep	1493.68	1483.62	1463.51	1470.75	1462.75	1449.92	1437.10
8-Sep	1473.57	1464.72	1469.54	1471.30	1445.65	1422.82	1392.81
9-Sep	1478.59	1468.54	1467.13	1474.36	1449.92	1432.82	1412.81
10-Sep	1488.65	1473.57	1465.92	1473.16	1458.47	1441.37	1422.82
11-Sep	1498.71	1488.65	1468.54	1470.75	1467.02	1449.92	1441.37
12-Sep	1508.76	1498.71	1478.59	1467.13	1475.57	1462.75	1449.92
13-Sep	1490.02	1508.76	1488.65	1464.72	1471.95	1471.30	1458.47
14-Sep	1513.79	1503.73	1483.62	1465.92	1474.36	1462.75	1454.20
15-Sep	1498.71	1488.65	1468.54	1470.75	1467.02	1449.92	1441.37
16-Sep	1478.59	1468.54	1467.13	1474.36	1449.92	1432.82	1412.81
17-Sep	1483.62	1468.54	1465.92	1474.36	1454.20	1437.10	1422.82
18-Sep	1503.73	1488.65	1473.57	1469.54	1471.30	1454.20	1445.65
19-Sep	1498.71	1488.65	1468.54	1470.75	1467.02	1449.92	1441.37
20-Sep	1498.71	1488.65	1468.54	1470.75	1467.02	1449.92	1441.37
21-Sep	1441.37	1422.82	1382.81	1333.88	1340.41	1333.32	1302.23
22-Sep	1382.81	1362.80	1333.88	1340.41	1302.23	1271.15	1240.06
23-Sep	1412.81	1392.81	1352.80	1337.15	1333.32	1302.23	1271.15
24-Sep	1441.37	1422.82	1382.81	1333.88	1340.41	1333.32	1302.23
25-Sep	1250.42	1233.61	1207.83	1169.35	1159.75	1181.16	1180.63
26-Sep	1173.02	1168.11	1164.97	1175.59	1139.40	1084.06	1042.56
27-Sep	997.27	991.38	985.49	974.74	967.46	962.60	960.17
28-Sep	806.73	816.83	830.29	850.48	870.68	884.14	894.23
29-Sep	948.98	944.19	937.81	928.24	918.67	912.29	907.50
30-Sep	936.53	936.36	936.03	935.52	934.93	934.67	934.42

Table A39. Summer 2002 allocation scenario time series results for the algae – midge guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	2471.63	2428.77	2385.92	2285.93	2200.22	2143.08	2114.52
2-Jun	2914.45	2871.59	2828.74	2728.75	2643.04	2585.90	2557.33
3-Jun	3315.11	3284.44	3243.54	3182.21	3120.87	3079.98	3059.53
4-Jun	4029.55	3930.53	3798.51	3600.47	3448.00	3407.11	3376.44
5-Jun	3897.52	3798.51	3666.48	3468.45	3407.11	3366.22	3335.55
6-Jun	3427.56	3407.11	3366.22	3304.88	3233.32	3202.65	3171.98
7-Jun	3468.45	3437.78	3396.89	3335.55	3274.21	3233.32	3202.65
8-Jun	3407.11	3386.67	3345.77	3274.21	3212.88	3171.98	3151.54
9-Jun	5017.75	4932.33	4761.48	4524.63	4293.59	4194.57	4095.56
10-Jun	5168.22	5207.89	5260.79	5060.46	4804.19	4633.35	4524.63
11-Jun	8072.73	7800.92	6619.08	5154.99	5234.34	5231.30	5103.17
12-Jun	7996.91	7984.40	8013.62	8084.56	6323.61	5141.77	5168.22
13-Jun	8025.44	8049.09	8096.38	6323.61	5181.44	5234.34	5260.79
14-Jun	4029.55	3963.53	3831.51	3633.48	3448.00	3417.34	3386.67
15-Jun	3294.66	3274.21	3233.32	3171.98	3100.42	3059.53	3039.08
16-Jun	3090.20	3069.75	3028.86	2957.30	2871.59	2814.46	2785.89
17-Jun	5017.75	4889.61	4718.77	4491.62	4293.59	4161.57	4062.55
18-Jun	5141.77	5181.44	5221.11	5145.88	4889.61	4718.77	4633.35
19-Jun	8037.27	8060.91	7800.92	6028.15	5194.67	5234.34	5274.01
20-Jun	8015.67	8003.17	7978.15	8049.09	7210.00	6323.61	5437.23
21-Jun	5181.44	5221.11	5260.79	5017.75	4761.48	4590.64	4524.63
22-Jun	8025.44	8049.09	8096.38	6323.61	5181.44	5234.34	5260.79
23-Jun	7991.05	8015.87	8028.18	7984.40	8037.27	8084.56	7800.92
24-Jun	7844.10	7880.34	7928.99	8003.46	8021.93	7996.91	7978.15
25-Jun	7753.52	7781.69	7832.02	7904.50	7991.05	8028.28	8028.18
26-Jun	7654.91	7697.17	7753.52	7832.02	7904.50	7953.81	7991.05
27-Jun	7672.28	7669.00	7725.35	7807.86	7892.42	7941.40	7966.22
28-Jun	5017.75	4932.33	4761.48	4524.63	4293.59	4194.57	4095.56
29-Jun	5231.30	5145.88	4975.04	4676.06	4458.62	4326.60	4260.58
30-Jun	3448.00	3417.34	3386.67	3315.11	3253.77	3212.88	3192.43
1-Jul	7856.18	7892.42	7928.99	8015.87	8015.67	7990.66	7978.15
2-Jul	7996.91	7984.40	8013.62	8084.56	6323.61	5141.77	5168.22
3-Jul	8034.44	8021.93	7996.91	8013.62	8096.38	7210.00	6323.61
4-Jul	7753.52	7781.69	7832.02	7904.50	7991.05	8028.28	8028.18
5-Jul	4899.40	4883.33	5336.76	7689.65	7711.26	7767.61	7795.78
6-Jul	5940.84	5540.32	4931.52	4883.33	6769.33	7689.65	7654.91
7-Jul	7526.00	6942.13	6341.36	4939.55	4891.36	4859.24	5814.29
8-Jul	8693.74	8304.49	7526.00	6141.10	4939.55	4907.43	4891.36
9-Jul	8808.92	8868.50	8304.49	7136.75	5940.84	5139.81	4923.49
10-Jul	8729.49	8789.06	8868.50	7915.25	6741.87	5940.84	5340.07
11-Jul	9905.57	8709.63	8789.06	8693.74	7526.00	6741.87	6141.10
12-Jul	10513.47	9297.67	8749.35	8888.36	7720.62	6942.13	6541.61
13-Jul	7526.00	6942.13	6341.36	4939.55	4891.36	4859.24	5814.29
14-Jul	7753.52	7781.69	7832.02	7904.50	7991.05	8028.28	8028.18

Table A39, continued. Summer 2002 allocation scenario time series results for the algae – midge guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	7753.52	7795.78	7844.10	7916.58	7991.05	8040.69	8021.93
16-Jul	5139.81	4931.52	4899.40	5336.76	7689.65	7669.00	7711.26
17-Jul	7753.52	7795.78	7844.10	7916.58	7991.05	8040.69	8021.93
18-Jul	5814.29	6769.33	7689.65	7725.35	7807.86	7856.18	7880.34
19-Jul	5740.58	5139.81	4915.46	4867.27	7246.86	7672.28	7683.08
20-Jul	7720.62	7331.38	6541.61	5340.07	4899.40	4875.30	5336.76
21-Jul	8888.36	8304.49	7720.62	6341.36	5139.81	4915.46	4899.40
22-Jul	8868.50	8693.74	7915.25	6741.87	5340.07	4931.52	4907.43
23-Jul	8828.78	8888.36	8304.49	6942.13	5740.58	4939.55	4923.49
24-Jul	8808.92	8868.50	8304.49	7136.75	5940.84	5139.81	4923.49
25-Jul	8848.64	8888.36	8109.87	6942.13	5540.32	4931.52	4915.46
26-Jul	8808.92	8868.50	8304.49	7136.75	5940.84	5139.81	4923.49
27-Jul	6541.61	6141.10	5340.07	4907.43	5336.76	7246.86	7707.01
28-Jul	7246.86	7689.65	7669.00	7767.61	7844.10	7892.42	7916.58
29-Jul	8015.87	8034.44	8009.42	7989.97	8060.91	7800.92	6914.54
30-Jul	7996.91	7984.40	8013.62	8084.56	6323.61	5141.77	5168.22
31-Jul	7739.43	7767.61	7819.94	7892.42	7978.64	8028.28	8034.44
1-Aug	4883.33	4859.24	6769.33	7654.91	7739.43	7795.78	7832.02
2-Aug	8868.50	8499.11	7720.62	6541.61	5340.07	4923.49	4899.40
3-Aug	9905.57	8709.63	8789.06	8693.74	7526.00	6741.87	6141.10
4-Aug	12337.17	11121.37	8689.77	8808.92	8304.49	7526.00	7136.75
5-Aug	9905.57	8709.63	8789.06	8693.74	7526.00	6741.87	6141.10
6-Aug	7526.00	6942.13	6341.36	4939.55	4891.36	4859.24	5814.29
7-Aug	8304.49	7720.62	6942.13	5740.58	4923.49	4891.36	4867.27
8-Aug	11729.27	10513.47	8709.63	8828.78	8109.87	7526.00	6942.13
9-Aug	22095.14	18955.27	15815.39	11121.37	8729.49	8808.92	8848.64
10-Aug	26052.39	23141.76	20001.89	13552.97	9905.57	8729.49	8769.21
11-Aug	29321.91	26869.77	23141.76	16862.02	12337.17	9905.57	8709.63
12-Aug	30139.29	28504.53	25235.01	18955.27	12945.07	11121.37	9297.67
13-Aug	8109.87	7526.00	6942.13	5540.32	4915.46	4883.33	4867.27
14-Aug	8689.77	8749.35	8808.92	8304.49	7136.75	6341.36	5940.84
15-Aug	13552.97	11729.27	9297.67	8789.06	8693.74	7915.25	7331.38
16-Aug	8888.36	8304.49	7720.62	6341.36	5139.81	4915.46	4899.40
17-Aug	12945.07	11121.37	9297.67	8808.92	8499.11	7720.62	7331.38
18-Aug	15815.39	13552.97	11121.37	8729.49	8848.64	8499.11	8109.87
19-Aug	20001.89	16862.02	13552.97	9905.57	8769.21	8848.64	8693.74
20-Aug	21048.51	18955.27	14768.77	11121.37	8749.35	8828.78	8868.50
21-Aug	22095.14	18955.27	15815.39	11121.37	8729.49	8808.92	8848.64
22-Aug	23141.76	20001.89	15815.39	11729.27	8709.63	8789.06	8848.64
23-Aug	24188.39	21048.51	16862.02	12337.17	8689.77	8769.21	8828.78
24-Aug	23141.76	20001.89	15815.39	11729.27	8709.63	8789.06	8848.64
25-Aug	21048.51	18955.27	14768.77	11121.37	8749.35	8828.78	8868.50
26-Aug	21048.51	18955.27	14768.77	11121.37	8749.35	8828.78	8868.50
27-Aug	21048.51	18955.27	14768.77	11121.37	8749.35	8828.78	8868.50

Table A39, continued. Summer 2002 allocation scenario time series results for the algae – midge guild at the Posey Hollow study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	16862.02	14768.77	12337.17	8689.77	8828.78	8888.36	8304.49
29-Aug	8808.92	8868.50	8304.49	7136.75	5940.84	5139.81	4923.49
30-Aug	9905.57	8709.63	8789.06	8693.74	7526.00	6741.87	6141.10
31-Aug	14160.87	12945.07	10513.47	8749.35	8888.36	8109.87	7720.62
1-Sep	18955.27	15815.39	13552.97	9297.67	8789.06	8868.50	8693.74
2-Sep	25235.01	23141.76	18955.27	12945.07	9297.67	8749.35	8789.06
3-Sep	28504.53	26052.39	23141.76	15815.39	11729.27	9297.67	8709.63
4-Sep	29321.91	26869.77	23141.76	16862.02	12337.17	9905.57	8709.63
5-Sep	31774.05	29321.91	26869.77	20001.89	14160.87	11729.27	10513.47
6-Sep	35413.65	32591.43	29321.91	24188.39	17908.64	14160.87	12337.17
7-Sep	30139.29	28504.53	25235.01	18955.27	12945.07	11121.37	9297.67
8-Sep	26869.77	24188.39	20001.89	14160.87	10513.47	8709.63	8769.21
9-Sep	27687.15	26052.39	22095.14	15815.39	11121.37	8689.77	8729.49
10-Sep	29321.91	26869.77	23141.76	16862.02	12337.17	9905.57	8709.63
11-Sep	30956.67	29321.91	26052.39	18955.27	13552.97	11121.37	9905.57
12-Sep	32591.43	30956.67	27687.15	22095.14	14768.77	12945.07	11121.37
13-Sep	35413.65	32591.43	29321.91	24188.39	17908.64	14160.87	12337.17
14-Sep	33408.81	31774.05	28504.53	23141.76	15815.39	12945.07	11729.27
15-Sep	30956.67	29321.91	26052.39	18955.27	13552.97	11121.37	9905.57
16-Sep	27687.15	26052.39	22095.14	15815.39	11121.37	8689.77	8729.49
17-Sep	28504.53	26052.39	23141.76	15815.39	11729.27	9297.67	8709.63
18-Sep	31774.05	29321.91	26869.77	20001.89	14160.87	11729.27	10513.47
19-Sep	30956.67	29321.91	26052.39	18955.27	13552.97	11121.37	9905.57
20-Sep	30956.67	29321.91	26052.39	18955.27	13552.97	11121.37	9905.57
21-Sep	9905.57	8709.63	8789.06	8693.74	7526.00	6741.87	6141.10
22-Sep	8789.06	8828.78	8693.74	7526.00	6141.10	5540.32	4939.55
23-Sep	8729.49	8769.21	8848.64	8109.87	6741.87	6141.10	5540.32
24-Sep	9905.57	8709.63	8789.06	8693.74	7526.00	6741.87	6141.10
25-Sep	5139.81	4931.52	4899.40	5336.76	7689.65	7669.00	7711.26
26-Sep	7844.10	7880.34	7928.99	8003.46	8021.93	7996.91	7978.15
27-Sep	4975.04	4846.90	4718.77	4458.62	4260.58	4128.56	4062.55
28-Sep	1459.26	1449.34	1436.13	1416.30	1396.47	1383.26	1373.34
29-Sep	1513.26	1511.13	1508.30	1504.04	1499.79	1496.95	1494.83
30-Sep	3253.77	3233.32	3192.43	3131.09	3059.53	3028.86	2998.19

Table A40. Summer 1999 allocation scenario time series results for the fast generalist guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	165.18	165.18	165.18	165.18	165.18	165.18	163.68
2-Jun	165.18	165.18	165.18	165.18	165.18	165.18	165.18
3-Jun	157.66	159.16	162.17	165.18	165.18	165.18	165.18
4-Jun	157.66	157.66	159.16	163.68	165.18	165.18	165.18
5-Jun	162.17	164.43	165.18	165.18	165.18	165.18	165.18
6-Jun	160.67	162.17	165.18	165.18	165.18	165.18	165.18
7-Jun	159.16	160.67	163.68	165.18	165.18	165.18	165.18
8-Jun	157.66	159.16	162.17	165.18	165.18	165.18	165.18
9-Jun	115.95	157.66	157.66	157.66	160.67	162.92	165.18
10-Jun	82.59	115.95	157.66	157.66	159.16	162.17	163.68
11-Jun	81.69	82.36	82.59	157.66	157.66	157.66	158.41
12-Jun	80.78	81.23	82.14	95.10	157.66	157.66	157.66
13-Jun	80.78	81.23	82.14	95.10	157.66	157.66	157.66
14-Jun	80.78	81.23	82.14	95.10	157.66	157.66	157.66
15-Jun	80.78	81.23	82.14	95.10	157.66	157.66	157.66
16-Jun	80.78	81.23	82.14	95.10	157.66	157.66	157.66
17-Jun	82.36	82.59	115.95	157.66	157.66	158.41	160.67
18-Jun	82.36	82.59	136.81	157.66	157.66	159.16	161.42
19-Jun	81.01	81.46	82.36	115.95	157.66	157.66	157.66
20-Jun	80.56	81.01	81.91	95.10	157.66	157.66	157.66
21-Jun	80.56	81.01	81.91	95.10	157.66	157.66	157.66
22-Jun	80.33	81.01	81.69	82.59	157.66	157.66	157.66
23-Jun	79.66	80.33	81.23	82.59	136.81	157.66	157.66
24-Jun	79.21	79.66	80.56	81.91	95.10	157.66	157.66
25-Jun	79.21	79.66	80.56	81.91	95.10	157.66	157.66
26-Jun	79.43	79.88	80.78	82.14	115.95	157.66	157.66
27-Jun	79.66	80.33	81.23	82.59	136.81	157.66	157.66
28-Jun	81.01	81.46	82.36	115.95	157.66	157.66	157.66
29-Jun	80.78	81.23	82.14	95.10	157.66	157.66	157.66
30-Jun	80.78	81.23	82.14	95.10	157.66	157.66	157.66
1-Jul	80.78	81.23	82.14	95.10	157.66	157.66	157.66
2-Jul	80.78	81.23	82.14	95.10	157.66	157.66	157.66
3-Jul	79.43	79.88	80.78	82.14	115.95	157.66	157.66
4-Jul	76.58	77.18	78.31	79.66	81.01	81.91	82.59
5-Jul	75.67	76.27	77.48	79.21	80.56	81.46	81.91
6-Jul	76.58	77.18	78.31	79.66	81.01	81.91	82.59
7-Jul	78.31	78.98	79.88	81.23	82.59	95.10	157.66
8-Jul	77.78	78.31	79.21	80.56	82.14	82.59	95.10
9-Jul	76.58	77.48	78.53	79.88	81.23	82.14	82.59
10-Jul	76.58	77.48	78.53	79.88	81.23	82.14	82.59
11-Jul	76.27	76.88	78.08	79.43	81.01	81.69	82.36
12-Jul	76.27	76.88	78.08	79.43	81.01	81.69	82.36
13-Jul	76.27	76.88	78.08	79.43	81.01	81.69	82.36
14-Jul	76.58	77.18	78.31	79.66	81.01	81.91	82.59

Table A40, continued. Summer 1999 allocation scenario time series results for the fast generalist guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	76.27	76.88	78.08	79.43	81.01	81.69	82.36
16-Jul	76.27	76.88	78.08	79.43	81.01	81.69	82.36
17-Jul	75.97	76.58	77.78	79.21	80.78	81.69	82.14
18-Jul	75.97	76.58	77.78	79.21	80.78	81.69	82.14
19-Jul	75.67	76.27	77.48	79.21	80.56	81.46	81.91
20-Jul	75.67	76.27	77.48	79.21	80.56	81.46	81.91
21-Jul	75.67	76.27	77.48	79.21	80.56	81.46	81.91
22-Jul	76.88	77.78	78.76	80.11	81.46	82.36	82.59
23-Jul	80.11	80.78	81.46	82.59	157.66	157.66	157.66
24-Jul	81.23	81.91	82.59	157.66	157.66	157.66	157.66
25-Jul	78.53	79.21	80.11	81.46	82.59	115.95	157.66
26-Jul	78.08	78.53	79.43	80.78	82.36	82.59	115.95
27-Jul	76.88	77.78	78.76	80.11	81.46	82.36	82.59
28-Jul	76.88	77.78	78.76	80.11	81.46	82.36	82.59
29-Jul	76.58	77.48	78.53	79.88	81.23	82.14	82.59
30-Jul	76.88	77.78	78.76	80.11	81.46	82.36	82.59
31-Jul	76.88	77.78	78.76	80.11	81.46	82.36	82.59
1-Aug	76.88	77.78	78.76	80.11	81.46	82.36	82.59
2-Aug	76.88	77.78	78.76	80.11	81.46	82.36	82.59
3-Aug	76.88	77.78	78.76	80.11	81.46	82.36	82.59
4-Aug	76.88	77.78	78.76	80.11	81.46	82.36	82.59
5-Aug	76.88	77.78	78.76	80.11	81.46	82.36	82.59
6-Aug	76.58	77.48	78.53	79.88	81.23	82.14	82.59
7-Aug	76.58	77.48	78.53	79.88	81.23	82.14	82.59
8-Aug	76.58	77.48	78.53	79.88	81.23	82.14	82.59
9-Aug	76.88	77.78	78.76	80.11	81.46	82.36	82.59
10-Aug	76.88	77.78	78.76	80.11	81.46	82.36	82.59
11-Aug	76.58	77.18	78.31	79.66	81.01	81.91	82.59
12-Aug	75.97	76.58	77.78	79.21	80.78	81.69	82.14
13-Aug	76.58	77.18	78.31	79.66	81.01	81.91	82.59
14-Aug	78.53	79.21	80.11	81.46	82.59	115.95	157.66
15-Aug	80.11	80.78	81.46	82.59	157.66	157.66	157.66
16-Aug	80.78	81.23	82.14	95.10	157.66	157.66	157.66
17-Aug	78.76	79.43	80.11	81.69	82.59	136.81	157.66
18-Aug	78.31	78.76	79.66	81.01	82.59	82.59	136.81
19-Aug	77.78	78.31	79.21	80.56	82.14	82.59	95.10
20-Aug	79.21	79.66	80.56	81.91	95.10	157.66	157.66
21-Aug	81.69	82.36	82.59	157.66	157.66	157.66	158.41
22-Aug	81.01	81.69	82.59	136.81	157.66	157.66	157.66
23-Aug	165.18	165.18	165.18	165.18	165.18	165.18	165.18
24-Aug	165.18	165.18	165.18	165.18	165.18	165.18	165.18
25-Aug	165.18	165.18	165.18	165.18	165.18	165.18	165.18
26-Aug	165.18	165.18	165.18	165.18	165.18	165.18	165.18
27-Aug	157.66	159.92	162.17	165.18	165.18	165.18	165.18

Table A40, continued. Summer 1999 allocation scenario time series results for the fast generalist guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	165.18	165.18	165.18	165.18	165.18	162.17	159.92
29-Aug	157.66	157.66	157.66	157.66	153.16	147.15	142.65
30-Aug	159.92	157.66	157.66	157.66	157.66	157.66	157.66
31-Aug	165.18	165.18	165.18	165.18	165.18	165.18	163.68
1-Sep	165.18	165.18	165.18	165.18	165.18	165.18	165.18
2-Sep	159.16	160.67	163.68	165.18	165.18	165.18	165.18
3-Sep	157.66	157.66	159.92	164.43	165.18	165.18	165.18
4-Sep	157.66	157.66	158.41	163.68	165.18	165.18	165.18
5-Sep	165.18	165.18	164.43	159.16	157.66	157.66	157.66
6-Sep	43.48	42.04	40.60	37.24	34.35	32.43	31.47
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10-Sep	23.12	22.22	21.02	19.22	17.42	16.22	15.32
11-Sep	32.42	32.56	32.83	33.04	33.04	33.04	33.04
12-Sep	60.78	59.82	57.90	54.54	51.65	49.73	48.77
13-Sep	81.33	81.15	80.79	80.24	79.61	79.34	79.07
14-Sep	126.13	121.63	115.62	106.61	97.60	91.60	87.09
15-Sep	156.16	153.16	147.15	138.14	127.63	121.63	118.62
16-Sep	33.04	33.04	33.04	33.04	33.04	33.04	33.04
17-Sep	31.17	31.10	31.04	30.90	30.78	30.70	30.66
18-Sep	33.04	33.04	33.04	32.92	32.58	32.34	32.23
19-Sep	62.70	61.26	59.34	56.46	53.57	51.65	50.21
20-Sep	79.34	79.16	78.80	78.17	75.68	73.76	72.79
21-Sep	78.80	78.53	78.26	75.68	72.79	70.87	69.91
22-Sep	33.04	33.04	32.92	32.52	32.17	31.94	31.82
23-Sep	21.32	20.42	19.22	17.42	15.62	14.41	13.51
24-Sep	33.04	33.04	33.04	32.69	32.34	32.11	31.94
25-Sep	36.76	35.80	33.87	30.99	30.37	30.65	30.78
26-Sep	69.91	68.95	67.03	63.67	60.78	58.86	57.90
27-Sep	80.43	80.24	79.88	79.25	78.71	78.35	78.17
28-Sep	82.59	82.41	82.05	81.51	80.88	80.52	80.34
29-Sep	81.60	81.33	81.06	80.43	79.88	79.52	79.34
30-Sep	30.23	30.19	30.11	29.43	27.33	26.43	25.53

Table A41. Summer 1999 allocation scenario time series results for the pool – run guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	3686.84	3686.84	3678.03	3657.47	3585.74	3537.92	3539.42
2-Jun	3671.90	3612.82	3607.29	3635.62	3679.09	3686.84	3680.97
3-Jun	3779.83	3780.43	3785.24	3750.67	3632.52	3602.57	3616.74
4-Jun	3785.25	3781.64	3780.43	3787.65	3691.60	3612.82	3597.85
5-Jun	3785.24	3788.86	3750.67	3612.82	3616.74	3635.62	3648.09
6-Jun	3782.84	3785.24	3790.06	3671.90	3607.29	3621.46	3635.62
7-Jun	3780.43	3782.84	3787.65	3711.29	3597.85	3616.74	3626.18
8-Jun	3779.83	3780.43	3785.24	3750.67	3632.52	3602.57	3616.74
9-Jun	3658.17	3796.10	3794.29	3783.44	3782.84	3786.45	3790.06
10-Jun	3550.83	3658.17	3796.10	3785.25	3780.43	3785.24	3787.65
11-Jun	3559.83	3569.96	3558.33	3796.10	3787.06	3779.83	3779.22
12-Jun	3546.32	3553.07	3566.58	3589.21	3794.29	3788.87	3783.44
13-Jun	3546.32	3553.07	3566.58	3589.21	3794.29	3788.87	3783.44
14-Jun	3546.32	3553.07	3566.58	3589.21	3794.29	3788.87	3783.44
15-Jun	3546.32	3553.07	3566.58	3589.21	3794.29	3788.87	3783.44
16-Jun	3546.32	3553.07	3566.58	3589.21	3794.29	3788.87	3783.44
17-Jun	3569.96	3565.84	3658.17	3794.29	3781.64	3779.22	3782.84
18-Jun	3569.96	3558.33	3727.14	3792.48	3781.64	3780.43	3784.04
19-Jun	3549.69	3556.45	3569.96	3658.17	3792.48	3787.06	3781.64
20-Jun	3542.94	3549.69	3563.21	3589.21	3796.10	3788.87	3785.25
21-Jun	3542.94	3549.69	3563.21	3589.21	3796.10	3788.87	3785.25
22-Jun	3539.56	3549.69	3559.83	3550.83	3796.10	3790.68	3787.06
23-Jun	3537.52	3539.56	3553.07	3573.34	3727.14	3796.10	3790.68
24-Jun	3536.16	3537.52	3542.94	3563.21	3589.21	3796.10	3796.10
25-Jun	3536.16	3537.52	3542.94	3563.21	3589.21	3796.10	3796.10
26-Jun	3536.84	3538.20	3546.32	3566.58	3658.17	3796.10	3794.29
27-Jun	3537.52	3539.56	3553.07	3573.34	3727.14	3796.10	3790.68
28-Jun	3549.69	3556.45	3569.96	3658.17	3792.48	3787.06	3781.64
29-Jun	3546.32	3553.07	3566.58	3589.21	3794.29	3788.87	3783.44
30-Jun	3546.32	3553.07	3566.58	3589.21	3794.29	3788.87	3783.44
1-Jul	3546.32	3553.07	3566.58	3589.21	3794.29	3788.87	3783.44
2-Jul	3546.32	3553.07	3566.58	3589.21	3794.29	3788.87	3783.44
3-Jul	3536.84	3538.20	3546.32	3566.58	3658.17	3796.10	3794.29
4-Jul	3340.47	3417.38	3533.43	3537.52	3549.69	3563.21	3573.34
5-Jul	3225.10	3302.01	3455.84	3536.16	3542.94	3556.45	3563.21
6-Jul	3340.47	3417.38	3533.43	3537.52	3549.69	3563.21	3573.34
7-Jul	3533.43	3535.47	3538.20	3553.07	3573.34	3589.21	3796.10
8-Jul	3494.29	3533.43	3536.16	3542.94	3566.58	3558.33	3589.21
9-Jul	3340.47	3455.84	3534.11	3538.20	3553.07	3566.58	3565.84
10-Jul	3340.47	3455.84	3534.11	3538.20	3553.07	3566.58	3565.84
11-Jul	3302.01	3378.93	3532.75	3536.84	3549.69	3559.83	3569.96
12-Jul	3302.01	3378.93	3532.75	3536.84	3549.69	3559.83	3569.96
13-Jul	3302.01	3378.93	3532.75	3536.84	3549.69	3559.83	3569.96
14-Jul	3340.47	3417.38	3533.43	3537.52	3549.69	3563.21	3573.34

Table A41, continued. Summer 1999 allocation scenario time series results for the pool – run guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	3302.01	3378.93	3532.75	3536.84	3549.69	3559.83	3569.96
16-Jul	3302.01	3378.93	3532.75	3536.84	3549.69	3559.83	3569.96
17-Jul	3263.56	3340.47	3494.29	3536.16	3546.32	3559.83	3566.58
18-Jul	3263.56	3340.47	3494.29	3536.16	3546.32	3559.83	3566.58
19-Jul	3225.10	3302.01	3455.84	3536.16	3542.94	3556.45	3563.21
20-Jul	3225.10	3302.01	3455.84	3536.16	3542.94	3556.45	3563.21
21-Jul	3225.10	3302.01	3455.84	3536.16	3542.94	3556.45	3563.21
22-Jul	3378.93	3494.29	3534.79	3538.88	3556.45	3569.96	3558.33
23-Jul	3538.88	3546.32	3556.45	3558.33	3796.10	3792.48	3788.87
24-Jul	3553.07	3563.21	3565.84	3796.10	3790.68	3783.44	3778.02
25-Jul	3534.11	3536.16	3538.88	3556.45	3565.84	3658.17	3796.10
26-Jul	3532.75	3534.11	3536.84	3546.32	3569.96	3558.33	3658.17
27-Jul	3378.93	3494.29	3534.79	3538.88	3556.45	3569.96	3558.33
28-Jul	3378.93	3494.29	3534.79	3538.88	3556.45	3569.96	3558.33
29-Jul	3340.47	3455.84	3534.11	3538.20	3553.07	3566.58	3565.84
30-Jul	3378.93	3494.29	3534.79	3538.88	3556.45	3569.96	3558.33
31-Jul	3378.93	3494.29	3534.79	3538.88	3556.45	3569.96	3558.33
1-Aug	3378.93	3494.29	3534.79	3538.88	3556.45	3569.96	3558.33
2-Aug	3378.93	3494.29	3534.79	3538.88	3556.45	3569.96	3558.33
3-Aug	3378.93	3494.29	3534.79	3538.88	3556.45	3569.96	3558.33
4-Aug	3378.93	3494.29	3534.79	3538.88	3556.45	3569.96	3558.33
5-Aug	3378.93	3494.29	3534.79	3538.88	3556.45	3569.96	3558.33
6-Aug	3340.47	3455.84	3534.11	3538.20	3553.07	3566.58	3565.84
7-Aug	3340.47	3455.84	3534.11	3538.20	3553.07	3566.58	3565.84
8-Aug	3340.47	3455.84	3534.11	3538.20	3553.07	3566.58	3565.84
9-Aug	3378.93	3494.29	3534.79	3538.88	3556.45	3569.96	3558.33
10-Aug	3378.93	3494.29	3534.79	3538.88	3556.45	3569.96	3558.33
11-Aug	3340.47	3417.38	3533.43	3537.52	3549.69	3563.21	3573.34
12-Aug	3263.56	3340.47	3494.29	3536.16	3546.32	3559.83	3566.58
13-Aug	3340.47	3417.38	3533.43	3537.52	3549.69	3563.21	3573.34
14-Aug	3534.11	3536.16	3538.88	3556.45	3565.84	3658.17	3796.10
15-Aug	3538.88	3546.32	3556.45	3558.33	3796.10	3792.48	3788.87
16-Aug	3546.32	3553.07	3566.58	3589.21	3794.29	3788.87	3783.44
17-Aug	3534.79	3536.84	3538.88	3559.83	3558.33	3727.14	3796.10
18-Aug	3533.43	3534.79	3537.52	3549.69	3573.34	3550.83	3727.14
19-Aug	3494.29	3533.43	3536.16	3542.94	3566.58	3558.33	3589.21
20-Aug	3536.16	3537.52	3542.94	3563.21	3589.21	3796.10	3796.10
21-Aug	3559.83	3569.96	3558.33	3796.10	3787.06	3779.83	3779.22
22-Aug	3549.69	3559.83	3573.34	3727.14	3792.48	3785.25	3779.83
23-Aug	3602.57	3616.74	3635.62	3679.09	3683.90	3672.16	3663.34
24-Aug	3616.74	3630.90	3648.09	3686.84	3675.09	3663.34	3657.47
25-Aug	3648.09	3671.34	3686.84	3675.09	3657.47	3609.65	3585.74
26-Aug	3691.60	3652.21	3597.85	3626.18	3671.34	3686.84	3686.84
27-Aug	3778.02	3781.63	3785.24	3730.98	3612.82	3607.29	3616.74

Table A41, continued. Summer 1999 allocation scenario time series results for the pool – run guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	3683.90	3675.09	3663.34	3609.65	3537.92	3540.93	3543.18
29-Aug	3409.27	3387.10	3364.49	3361.76	3344.78	3323.96	3308.35
30-Aug	3543.18	3545.44	3502.79	3438.82	3394.49	3364.94	3363.58
31-Aug	3686.84	3686.84	3678.03	3660.41	3597.70	3549.88	3539.42
1-Sep	3652.21	3593.13	3612.01	3640.34	3686.84	3686.84	3678.03
2-Sep	3780.43	3782.84	3787.65	3711.29	3597.85	3616.74	3626.18
3-Sep	3783.44	3779.83	3781.63	3788.86	3671.90	3612.82	3602.57
4-Sep	3787.06	3783.44	3779.22	3787.65	3711.29	3632.52	3593.13
5-Sep	3597.70	3561.83	3538.67	3543.94	3502.79	3460.14	3438.82
6-Sep	2741.41	2727.59	2713.77	2681.52	2653.89	2635.46	2626.25
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10-Sep	840.18	834.54	827.02	815.74	804.46	796.94	791.30
11-Sep	2106.16	2077.23	2019.37	1936.55	1844.56	1791.99	1765.70
12-Sep	2907.23	2898.02	2879.60	2847.35	2819.71	2801.29	2792.08
13-Sep	3092.55	3091.47	3089.30	3086.05	3082.26	3080.64	3079.02
14-Sep	3251.09	3235.47	3214.65	3183.42	3152.18	3131.36	3115.75
15-Sep	3355.20	3344.78	3323.96	3292.73	3256.29	3235.47	3225.06
16-Sep	1805.13	1765.70	1726.28	1634.28	1555.43	1502.86	1476.57
17-Sep	995.67	989.66	983.64	969.61	957.59	949.57	945.56
18-Sep	1384.58	1345.15	1305.72	1223.99	1175.93	1143.89	1127.87
19-Sep	2925.66	2911.84	2893.41	2865.78	2838.14	2819.71	2805.90
20-Sep	3080.64	3079.56	3077.39	3073.60	3050.03	3031.60	3022.39
21-Sep	3077.39	3075.77	3074.14	3050.03	3022.39	3003.97	2994.75
22-Sep	1292.58	1266.30	1223.99	1167.92	1119.86	1087.82	1071.80
23-Sep	828.90	823.26	815.74	804.46	793.18	785.66	780.02
24-Sep	1332.01	1292.58	1240.01	1191.95	1143.89	1111.85	1087.82
25-Sep	2676.92	2667.71	2649.28	2621.64	2540.11	2482.25	2453.32
26-Sep	2994.75	2985.54	2967.12	2934.87	2907.23	2888.81	2879.60
27-Sep	3087.14	3086.05	3083.89	3080.10	3076.85	3074.68	3073.60
28-Sep	3100.13	3099.05	3096.88	3093.63	3089.84	3087.68	3086.60
29-Sep	3094.18	3092.55	3090.93	3087.14	3083.89	3081.72	3080.64
30-Sep	903.46	899.46	891.44	879.66	866.50	860.86	855.22

Table A42. Summer 1999 allocation scenario time series results for the pool – cover guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	1627.39	1674.17	1674.91	1676.63	1683.85	1688.66	1699.03
2-Jun	1385.48	1397.12	1428.89	1484.68	1592.16	1658.58	1674.66
3-Jun	1248.12	1289.72	1325.97	1369.97	1393.24	1419.60	1447.49
4-Jun	1177.68	1224.64	1289.72	1344.09	1381.61	1397.12	1410.30
5-Jun	1325.97	1353.15	1369.97	1397.12	1447.49	1484.68	1513.62
6-Jun	1307.84	1325.97	1362.21	1385.48	1428.89	1456.79	1484.68
7-Jun	1289.72	1307.84	1344.09	1377.73	1410.30	1447.49	1466.09
8-Jun	1248.12	1289.72	1325.97	1369.97	1393.24	1419.60	1447.49
9-Jun	983.37	1038.34	1060.27	1201.16	1307.84	1335.03	1362.21
10-Jun	934.46	983.37	1037.31	1177.68	1289.72	1325.97	1344.09
11-Jun	875.34	891.91	922.12	1037.31	1154.20	1248.12	1280.66
12-Jun	853.25	864.29	886.38	955.89	1060.27	1130.71	1201.16
13-Jun	853.25	864.29	886.38	955.89	1060.27	1130.71	1201.16
14-Jun	853.25	864.29	886.38	955.89	1060.27	1130.71	1201.16
15-Jun	853.25	864.29	886.38	955.89	1060.27	1130.71	1201.16
16-Jun	853.25	864.29	886.38	955.89	1060.27	1130.71	1201.16
17-Jun	891.91	909.77	983.37	1060.27	1224.64	1280.66	1307.84
18-Jun	891.91	922.12	1010.86	1083.75	1224.64	1289.72	1316.91
19-Jun	858.77	869.82	891.91	983.37	1083.75	1154.20	1224.64
20-Jun	847.72	858.77	880.86	955.89	1036.79	1130.71	1177.68
21-Jun	847.72	858.77	880.86	955.89	1036.79	1130.71	1177.68
22-Jun	842.20	858.77	875.34	934.46	1037.31	1107.23	1154.20
23-Jun	821.23	842.20	864.29	897.43	1010.86	1036.79	1107.23
24-Jun	807.25	821.23	847.72	880.86	955.89	1037.82	1036.79
25-Jun	807.25	821.23	847.72	880.86	955.89	1037.82	1036.79
26-Jun	814.24	828.22	853.25	886.38	983.37	1037.82	1060.27
27-Jun	821.23	842.20	864.29	897.43	1010.86	1036.79	1107.23
28-Jun	858.77	869.82	891.91	983.37	1083.75	1154.20	1224.64
29-Jun	853.25	864.29	886.38	955.89	1060.27	1130.71	1201.16
30-Jun	853.25	864.29	886.38	955.89	1060.27	1130.71	1201.16
1-Jul	853.25	864.29	886.38	955.89	1060.27	1130.71	1201.16
2-Jul	853.25	864.29	886.38	955.89	1060.27	1130.71	1201.16
3-Jul	814.24	828.22	853.25	886.38	983.37	1037.82	1060.27
4-Jul	760.25	765.07	779.29	821.23	858.77	880.86	897.43
5-Jul	753.02	757.84	767.48	807.25	847.72	869.82	880.86
6-Jul	760.25	765.07	779.29	821.23	858.77	880.86	897.43
7-Jul	779.29	800.26	828.22	864.29	897.43	955.89	1038.34
8-Jul	769.89	779.29	807.25	847.72	886.38	922.12	955.89
9-Jul	760.25	767.48	786.28	828.22	864.29	886.38	909.77
10-Jul	760.25	767.48	786.28	828.22	864.29	886.38	909.77
11-Jul	757.84	762.66	772.30	814.24	858.77	875.34	891.91
12-Jul	757.84	762.66	772.30	814.24	858.77	875.34	891.91
13-Jul	757.84	762.66	772.30	814.24	858.77	875.34	891.91
14-Jul	760.25	765.07	779.29	821.23	858.77	880.86	897.43

Table A42, continued. Summer 1999 allocation scenario time series results for the pool – cover guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	757.84	762.66	772.30	814.24	858.77	875.34	891.91
16-Jul	757.84	762.66	772.30	814.24	858.77	875.34	891.91
17-Jul	755.43	760.25	769.89	807.25	853.25	875.34	886.38
18-Jul	755.43	760.25	769.89	807.25	853.25	875.34	886.38
19-Jul	753.02	757.84	767.48	807.25	847.72	869.82	880.86
20-Jul	753.02	757.84	767.48	807.25	847.72	869.82	880.86
21-Jul	753.02	757.84	767.48	807.25	847.72	869.82	880.86
22-Jul	762.66	769.89	793.27	835.21	869.82	891.91	922.12
23-Jul	835.21	853.25	869.82	922.12	1037.82	1083.75	1130.71
24-Jul	864.29	880.86	909.77	1038.34	1107.23	1201.16	1271.60
25-Jul	786.28	807.25	835.21	869.82	909.77	983.37	1037.82
26-Jul	772.30	786.28	814.24	853.25	891.91	922.12	983.37
27-Jul	762.66	769.89	793.27	835.21	869.82	891.91	922.12
28-Jul	762.66	769.89	793.27	835.21	869.82	891.91	922.12
29-Jul	760.25	767.48	786.28	828.22	864.29	886.38	909.77
30-Jul	762.66	769.89	793.27	835.21	869.82	891.91	922.12
31-Jul	762.66	769.89	793.27	835.21	869.82	891.91	922.12
1-Aug	762.66	769.89	793.27	835.21	869.82	891.91	922.12
2-Aug	762.66	769.89	793.27	835.21	869.82	891.91	922.12
3-Aug	762.66	769.89	793.27	835.21	869.82	891.91	922.12
4-Aug	762.66	769.89	793.27	835.21	869.82	891.91	922.12
5-Aug	762.66	769.89	793.27	835.21	869.82	891.91	922.12
6-Aug	760.25	767.48	786.28	828.22	864.29	886.38	909.77
7-Aug	760.25	767.48	786.28	828.22	864.29	886.38	909.77
8-Aug	760.25	767.48	786.28	828.22	864.29	886.38	909.77
9-Aug	762.66	769.89	793.27	835.21	869.82	891.91	922.12
10-Aug	762.66	769.89	793.27	835.21	869.82	891.91	922.12
11-Aug	760.25	765.07	779.29	821.23	858.77	880.86	897.43
12-Aug	755.43	760.25	769.89	807.25	853.25	875.34	886.38
13-Aug	760.25	765.07	779.29	821.23	858.77	880.86	897.43
14-Aug	786.28	807.25	835.21	869.82	909.77	983.37	1037.82
15-Aug	835.21	853.25	869.82	922.12	1037.82	1083.75	1130.71
16-Aug	853.25	864.29	886.38	955.89	1060.27	1130.71	1201.16
17-Aug	793.27	814.24	835.21	875.34	922.12	1010.86	1037.82
18-Aug	779.29	793.27	821.23	858.77	897.43	934.46	1010.86
19-Aug	769.89	779.29	807.25	847.72	886.38	922.12	955.89
20-Aug	807.25	821.23	847.72	880.86	955.89	1037.82	1036.79
21-Aug	875.34	891.91	922.12	1037.31	1154.20	1248.12	1280.66
22-Aug	858.77	875.34	897.43	1010.86	1083.75	1177.68	1248.12
23-Aug	1419.60	1447.49	1484.68	1592.16	1674.42	1675.40	1676.14
24-Aug	1447.49	1475.38	1513.62	1642.99	1675.15	1676.14	1676.63
25-Aug	1513.62	1572.53	1627.39	1675.15	1676.63	1681.44	1683.85
26-Aug	1381.61	1389.36	1410.30	1466.09	1572.53	1642.99	1674.17
27-Aug	1271.60	1298.78	1325.97	1373.85	1397.12	1428.89	1447.49

Table A42, continued. Summer 1999 allocation scenario time series results for the pool – cover guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	1674.42	1675.15	1676.14	1681.44	1688.66	1709.40	1724.95
29-Aug	1774.79	1790.35	1809.09	1828.10	1853.45	1874.57	1890.40
30-Aug	1724.95	1740.50	1745.91	1754.03	1785.16	1805.92	1815.43
31-Aug	1611.80	1658.58	1674.91	1676.38	1682.65	1687.46	1699.03
1-Sep	1389.36	1401.00	1438.19	1493.98	1611.80	1674.17	1674.91
2-Sep	1289.72	1307.84	1344.09	1377.73	1410.30	1447.49	1466.09
3-Sep	1201.16	1248.12	1298.78	1353.15	1385.48	1397.12	1419.60
4-Sep	1154.20	1201.16	1280.66	1344.09	1377.73	1393.24	1401.00
5-Sep	1682.65	1686.25	1693.84	1730.13	1745.91	1751.32	1754.03
6-Sep	1835.70	1821.73	1807.76	1775.15	1747.20	1728.57	1719.25
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10-Sep	1489.20	1482.39	1473.30	1459.67	1446.05	1436.96	1430.15
11-Sep	1869.75	1879.15	1897.94	1901.50	1876.90	1862.85	1855.82
12-Sep	2003.39	1994.08	1975.44	1942.84	1914.89	1896.26	1886.94
13-Sep	2121.04	2123.82	2129.38	2137.72	2147.45	2151.62	2155.79
14-Sep	1948.48	1964.32	1985.43	2017.11	2048.79	2069.90	2085.74
15-Sep	1842.89	1853.45	1874.57	1906.24	1943.20	1964.32	1974.87
16-Sep	1866.36	1855.82	1845.28	1820.69	1799.61	1785.55	1778.52
17-Sep	1644.51	1638.99	1633.47	1620.58	1609.54	1602.18	1598.50
18-Sep	1753.93	1743.39	1732.85	1712.39	1703.70	1697.91	1695.01
19-Sep	2022.02	2008.05	1989.42	1961.47	1933.52	1914.89	1900.92
20-Sep	2151.62	2154.40	2159.96	2169.69	2147.79	2129.16	2119.84
21-Sep	2159.96	2164.13	2168.30	2147.79	2119.84	2101.21	2091.89
22-Sep	1729.33	1722.31	1712.39	1702.25	1693.57	1687.77	1684.88
23-Sep	1475.57	1468.76	1459.67	1446.05	1432.42	1423.33	1416.52
24-Sep	1739.88	1729.33	1715.28	1706.59	1697.91	1692.12	1687.77
25-Sep	1770.49	1761.18	1742.54	1714.60	1728.78	1747.57	1756.97
26-Sep	2091.89	2082.58	2063.95	2031.34	2003.39	1984.76	1975.44
27-Sep	2134.94	2137.72	2143.28	2153.01	2161.35	2166.91	2169.69
28-Sep	2101.58	2104.36	2109.92	2118.26	2127.99	2133.55	2136.33
29-Sep	2116.87	2121.04	2125.21	2134.94	2143.28	2148.84	2151.62
30-Sep	1559.85	1556.16	1548.80	1536.90	1521.00	1514.18	1507.37

Table A43. Summer 1999 allocation scenario time series results for the algae – midge guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	9197.32	9097.04	9157.46	9298.43	7940.85	7035.80	6796.48
2-Jun	11216.62	10530.34	10069.41	9605.06	9280.23	9130.47	9137.32
3-Jun	17479.58	16239.08	14414.13	12131.66	10759.10	10146.80	9914.63
4-Jun	18463.65	17807.60	16239.08	13501.66	11445.38	10530.34	10224.19
5-Jun	14414.13	13045.42	12131.66	10530.34	9914.63	9605.06	9478.18
6-Jun	15326.61	14414.13	12589.18	11216.62	10069.41	9837.23	9605.06
7-Jun	16239.08	15326.61	13501.66	11674.14	10224.19	9914.63	9759.84
8-Jun	17479.58	16239.08	14414.13	12131.66	10759.10	10146.80	9914.63
9-Jun	27835.42	20848.54	20103.76	18135.63	15326.61	13957.89	12589.18
10-Jun	33580.02	27835.42	20570.70	18463.65	16239.08	14414.13	13501.66
11-Jun	35183.66	34853.38	33967.78	20570.70	18791.67	17479.58	16695.32
12-Jun	35624.03	35403.85	34963.48	31328.86	20103.76	19119.69	18135.63
13-Jun	35624.03	35403.85	34963.48	31328.86	20103.76	19119.69	18135.63
14-Jun	35624.03	35403.85	34963.48	31328.86	20103.76	19119.69	18135.63
15-Jun	35624.03	35403.85	34963.48	31328.86	20103.76	19119.69	18135.63
16-Jun	35624.03	35403.85	34963.48	31328.86	20103.76	19119.69	18135.63
17-Jun	34853.38	34355.54	27835.42	20103.76	17807.60	16695.32	15326.61
18-Jun	34853.38	33967.78	24341.98	19775.74	17807.60	16239.08	14870.37
19-Jun	35513.94	35293.75	34853.38	27835.42	19775.74	18791.67	17807.60
20-Jun	35734.13	35513.94	35073.57	31328.86	20431.78	19119.69	18463.65
21-Jun	35734.13	35513.94	35073.57	31328.86	20431.78	19119.69	18463.65
22-Jun	35844.22	35513.94	35183.66	33580.02	20570.70	19447.71	18791.67
23-Jun	36383.43	35844.22	35403.85	34743.29	24341.98	20431.78	19447.71
24-Jun	36742.91	36383.43	35734.13	35073.57	31328.86	20709.62	20431.78
25-Jun	36742.91	36383.43	35734.13	35073.57	31328.86	20709.62	20431.78
26-Jun	36563.17	36203.69	35624.03	34963.48	27835.42	20709.62	20103.76
27-Jun	36383.43	35844.22	35403.85	34743.29	24341.98	20431.78	19447.71
28-Jun	35513.94	35293.75	34853.38	27835.42	19775.74	18791.67	17807.60
29-Jun	35624.03	35403.85	34963.48	31328.86	20103.76	19119.69	18135.63
30-Jun	35624.03	35403.85	34963.48	31328.86	20103.76	19119.69	18135.63
1-Jul	35624.03	35403.85	34963.48	31328.86	20103.76	19119.69	18135.63
2-Jul	35624.03	35403.85	34963.48	31328.86	20103.76	19119.69	18135.63
3-Jul	36563.17	36203.69	35624.03	34963.48	27835.42	20709.62	20103.76
4-Jul	40908.65	39601.83	37461.85	36383.43	35513.94	35073.57	34743.29
5-Jul	42868.89	41562.06	38948.41	36742.91	35734.13	35293.75	35073.57
6-Jul	40908.65	39601.83	37461.85	36383.43	35513.94	35073.57	34743.29
7-Jul	37461.85	36922.64	36203.69	35403.85	34743.29	31328.86	20848.54
8-Jul	38295.00	37461.85	36742.91	35734.13	34963.48	33967.78	31328.86
9-Jul	40908.65	38948.41	37282.12	36203.69	35403.85	34963.48	34355.54
10-Jul	40908.65	38948.41	37282.12	36203.69	35403.85	34963.48	34355.54
11-Jul	41562.06	40255.24	37641.59	36563.17	35513.94	35183.66	34853.38
12-Jul	41562.06	40255.24	37641.59	36563.17	35513.94	35183.66	34853.38
13-Jul	41562.06	40255.24	37641.59	36563.17	35513.94	35183.66	34853.38
14-Jul	40908.65	39601.83	37461.85	36383.43	35513.94	35073.57	34743.29

Table A43, continued. Summer 1999 allocation scenario time series results for the algae – midge guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	41562.06	40255.24	37641.59	36563.17	35513.94	35183.66	34853.38
16-Jul	41562.06	40255.24	37641.59	36563.17	35513.94	35183.66	34853.38
17-Jul	42215.48	40908.65	38295.00	36742.91	35624.03	35183.66	34963.48
18-Jul	42215.48	40908.65	38295.00	36742.91	35624.03	35183.66	34963.48
19-Jul	42868.89	41562.06	38948.41	36742.91	35734.13	35293.75	35073.57
20-Jul	42868.89	41562.06	38948.41	36742.91	35734.13	35293.75	35073.57
21-Jul	42868.89	41562.06	38948.41	36742.91	35734.13	35293.75	35073.57
22-Jul	40255.24	38295.00	37102.38	36023.96	35293.75	34853.38	33967.78
23-Jul	36023.96	35624.03	35293.75	33967.78	20709.62	19775.74	19119.69
24-Jul	35403.85	35073.57	34355.54	20848.54	19447.71	18135.63	17151.56
25-Jul	37282.12	36742.91	36023.96	35293.75	34355.54	27835.42	20709.62
26-Jul	37641.59	37282.12	36563.17	35624.03	34853.38	33967.78	27835.42
27-Jul	40255.24	38295.00	37102.38	36023.96	35293.75	34853.38	33967.78
28-Jul	40255.24	38295.00	37102.38	36023.96	35293.75	34853.38	33967.78
29-Jul	40908.65	38948.41	37282.12	36203.69	35403.85	34963.48	34355.54
30-Jul	40255.24	38295.00	37102.38	36023.96	35293.75	34853.38	33967.78
31-Jul	40255.24	38295.00	37102.38	36023.96	35293.75	34853.38	33967.78
1-Aug	40255.24	38295.00	37102.38	36023.96	35293.75	34853.38	33967.78
2-Aug	40255.24	38295.00	37102.38	36023.96	35293.75	34853.38	33967.78
3-Aug	40255.24	38295.00	37102.38	36023.96	35293.75	34853.38	33967.78
4-Aug	40255.24	38295.00	37102.38	36023.96	35293.75	34853.38	33967.78
5-Aug	40255.24	38295.00	37102.38	36023.96	35293.75	34853.38	33967.78
6-Aug	40908.65	38948.41	37282.12	36203.69	35403.85	34963.48	34355.54
7-Aug	40908.65	38948.41	37282.12	36203.69	35403.85	34963.48	34355.54
8-Aug	40908.65	38948.41	37282.12	36203.69	35403.85	34963.48	34355.54
9-Aug	40255.24	38295.00	37102.38	36023.96	35293.75	34853.38	33967.78
10-Aug	40255.24	38295.00	37102.38	36023.96	35293.75	34853.38	33967.78
11-Aug	40908.65	39601.83	37461.85	36383.43	35513.94	35073.57	34743.29
12-Aug	42215.48	40908.65	38295.00	36742.91	35624.03	35183.66	34963.48
13-Aug	40908.65	39601.83	37461.85	36383.43	35513.94	35073.57	34743.29
14-Aug	37282.12	36742.91	36023.96	35293.75	34355.54	27835.42	20709.62
15-Aug	36023.96	35624.03	35293.75	33967.78	20709.62	19775.74	19119.69
16-Aug	35624.03	35403.85	34963.48	31328.86	20103.76	19119.69	18135.63
17-Aug	37102.38	36563.17	36023.96	35183.66	33967.78	24341.98	20709.62
18-Aug	37461.85	37102.38	36383.43	35513.94	34743.29	33580.02	24341.98
19-Aug	38295.00	37461.85	36742.91	35734.13	34963.48	33967.78	31328.86
20-Aug	36742.91	36383.43	35734.13	35073.57	31328.86	20709.62	20431.78
21-Aug	35183.66	34853.38	33967.78	20570.70	18791.67	17479.58	16695.32
22-Aug	35513.94	35183.66	34743.29	24341.98	19775.74	18463.65	17479.58
23-Aug	10146.80	9914.63	9605.06	9280.23	9117.18	9197.73	9258.15
24-Aug	9914.63	9682.45	9478.18	9163.89	9177.60	9258.15	9298.43
25-Aug	9478.18	9329.72	9197.32	9177.60	9298.43	8393.38	7940.85
26-Aug	11445.38	10987.86	10224.19	9759.84	9329.72	9163.89	9097.04
27-Aug	17151.56	15782.85	14414.13	11902.90	10530.34	10069.41	9914.63

Table A43, continued. Summer 1999 allocation scenario time series results for the algae – midge guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	9117.18	9177.60	9258.15	8393.38	7035.80	6557.16	6198.17
29-Aug	5937.22	5968.86	6013.93	6094.52	5920.77	5635.39	5421.36
30-Aug	6198.17	5839.19	5861.53	5895.03	5958.31	6000.50	6040.79
31-Aug	9230.74	9130.47	9157.46	9278.29	8167.12	7262.06	6796.48
1-Sep	10987.86	10301.58	9992.02	9527.67	9230.74	9097.04	9157.46
2-Sep	16239.08	15326.61	13501.66	11674.14	10224.19	9914.63	9759.84
3-Sep	18135.63	17479.58	15782.85	13045.42	11216.62	10530.34	10146.80
4-Sep	18791.67	18135.63	16695.32	13501.66	11674.14	10759.10	10301.58
5-Sep	8167.12	7488.33	6916.14	6078.51	5861.53	5883.86	5895.03
6-Sep	2287.13	2275.68	2264.24	2237.53	2214.64	2199.38	2191.75
7-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10-Sep	498.78	502.37	507.15	514.33	521.51	526.29	529.88
11-Sep	1714.70	1688.09	1634.88	1590.92	1581.47	1576.06	1573.36
12-Sep	2424.48	2416.85	2401.59	2374.88	2351.99	2336.73	2329.10
13-Sep	2565.95	2565.72	2565.26	2564.58	2563.78	2563.43	2563.09
14-Sep	4636.56	4422.53	4137.15	3709.07	3281.00	2995.62	2781.59
15-Sep	6063.47	5920.77	5635.39	5207.32	4707.91	4422.53	4279.84
16-Sep	1577.41	1573.36	1569.31	1559.86	1551.75	1546.35	1543.65
17-Sep	934.12	909.33	884.53	826.67	777.08	744.02	727.49
18-Sep	1534.20	1530.14	1526.09	1485.77	1385.05	1317.91	1284.33
19-Sep	2439.74	2428.30	2413.03	2390.14	2367.25	2351.99	2340.54
20-Sep	2563.43	2563.20	2562.75	2561.95	2542.75	2527.49	2519.86
21-Sep	2562.75	2562.40	2562.06	2542.75	2519.86	2504.60	2496.97
22-Sep	1524.74	1522.04	1485.77	1368.27	1267.55	1200.40	1166.83
23-Sep	505.96	509.54	514.33	521.51	528.69	533.47	537.06
24-Sep	1528.79	1524.74	1519.34	1418.62	1317.91	1250.76	1200.40
25-Sep	2233.71	2226.08	2210.82	2187.93	2113.79	2060.57	2033.97
26-Sep	2496.97	2489.34	2474.08	2447.37	2424.48	2409.22	2401.59
27-Sep	2564.80	2564.58	2564.12	2563.32	2562.63	2562.17	2561.95
28-Sep	2567.55	2567.32	2566.86	2566.18	2565.38	2564.92	2564.69
29-Sep	2566.29	2565.95	2565.61	2564.80	2564.12	2563.66	2563.43
30-Sep	553.91	537.38	504.32	473.65	482.03	485.62	489.21

Table A44. Summer 2002 allocation scenario time series results for the fast generalist guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	40.12	39.16	37.24	33.87	30.99	30.17	30.30
2-Jun	56.94	55.50	53.57	50.69	47.81	45.89	44.45
3-Jun	77.12	75.68	73.76	70.87	67.99	66.07	64.63
4-Jun	81.06	80.79	80.52	79.88	79.34	78.98	78.80
5-Jun	80.70	80.43	80.06	79.52	78.98	78.62	78.35
6-Jun	79.07	78.80	78.44	77.12	74.24	72.31	70.87
7-Jun	79.34	79.16	78.80	78.17	75.68	73.76	72.79
8-Jun	78.80	78.53	78.26	75.68	72.79	70.87	69.91
9-Jun	103.61	99.11	94.60	84.09	82.14	81.78	81.60
10-Jun	126.13	121.63	115.62	106.61	97.60	91.60	87.09
11-Jun	148.65	145.65	139.64	129.13	120.13	114.12	111.12
12-Jun	157.66	157.66	157.66	148.65	139.64	133.64	130.63
13-Jun	156.16	153.16	147.15	138.14	127.63	121.63	118.62
14-Jun	81.15	80.88	80.61	79.97	79.43	79.07	78.89
15-Jun	76.16	74.72	73.28	69.91	67.03	65.11	64.15
16-Jun	65.59	64.15	62.22	59.34	56.46	54.54	53.09
17-Jun	102.11	99.11	93.10	82.59	82.05	81.69	81.51
18-Jun	129.13	126.13	120.13	111.12	100.61	94.60	91.60
19-Jun	154.66	151.65	145.65	136.64	126.13	121.63	117.12
20-Jun	157.66	157.66	157.66	154.66	144.15	139.64	135.14
21-Jun	124.63	120.13	114.12	105.11	96.10	90.10	85.59
22-Jun	156.16	153.16	147.15	138.14	127.63	121.63	118.62
23-Jun	157.66	157.66	157.66	157.66	157.66	151.65	148.65
24-Jun	159.16	157.66	157.66	157.66	157.66	157.66	157.66
25-Jun	165.18	163.68	160.67	157.66	157.66	157.66	157.66
26-Jun	165.18	165.18	165.18	161.42	157.66	157.66	157.66
27-Jun	165.18	165.18	165.18	162.17	157.66	157.66	157.66
28-Jun	103.61	99.11	94.60	84.09	82.14	81.78	81.60
29-Jun	111.12	108.11	102.11	91.60	82.59	82.23	82.05
30-Jun	79.16	78.98	78.62	78.08	74.72	73.28	71.83
1-Jul	158.41	157.66	157.66	157.66	157.66	157.66	157.66
2-Jul	157.66	157.66	157.66	148.65	139.64	133.64	130.63
3-Jul	157.66	157.66	157.66	157.66	150.15	144.15	141.14
4-Jul	165.18	163.68	160.67	157.66	157.66	157.66	157.66
5-Jul	165.18	165.18	165.18	165.18	165.18	165.18	164.43
6-Jul	165.18	165.18	165.18	165.18	165.18	165.18	165.18
7-Jul	165.18	165.18	165.18	165.18	165.18	165.18	165.18
8-Jul	164.43	165.18	165.18	165.18	165.18	165.18	165.18
9-Jul	160.67	162.17	165.18	165.18	165.18	165.18	165.18
10-Jul	157.66	159.16	162.17	165.18	165.18	165.18	165.18
11-Jul	157.66	157.66	158.41	163.68	165.18	165.18	165.18
12-Jul	157.66	157.66	157.66	162.17	165.18	165.18	165.18
13-Jul	165.18	165.18	165.18	165.18	165.18	165.18	165.18
14-Jul	165.18	163.68	160.67	157.66	157.66	157.66	157.66

Table A44, continued. Summer 2002 allocation scenario time series results for the fast generalist guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	165.18	162.92	159.92	157.66	157.66	157.66	157.66
16-Jul	165.18	165.18	165.18	165.18	165.18	165.18	165.18
17-Jul	165.18	162.92	159.92	157.66	157.66	157.66	157.66
18-Jul	165.18	165.18	165.18	165.18	163.68	160.67	159.16
19-Jul	165.18	165.18	165.18	165.18	165.18	165.18	165.18
20-Jul	165.18	165.18	165.18	165.18	165.18	165.18	165.18
21-Jul	163.68	165.18	165.18	165.18	165.18	165.18	165.18
22-Jul	162.17	164.43	165.18	165.18	165.18	165.18	165.18
23-Jul	160.67	162.92	165.18	165.18	165.18	165.18	165.18
24-Jul	160.67	162.17	165.18	165.18	165.18	165.18	165.18
25-Jul	161.42	163.68	165.18	165.18	165.18	165.18	165.18
26-Jul	160.67	162.17	165.18	165.18	165.18	165.18	165.18
27-Jul	165.18	165.18	165.18	165.18	165.18	165.18	165.18
28-Jul	165.18	165.18	165.18	165.18	160.67	158.41	157.66
29-Jul	157.66	157.66	157.66	157.66	153.16	148.65	144.15
30-Jul	157.66	157.66	157.66	148.65	139.64	133.64	130.63
31-Jul	165.18	164.43	161.42	157.66	157.66	157.66	157.66
1-Aug	165.18	165.18	165.18	165.18	165.18	164.43	162.92
2-Aug	162.92	165.18	165.18	165.18	165.18	165.18	165.18
3-Aug	157.66	157.66	158.41	163.68	165.18	165.18	165.18
4-Aug	157.66	157.66	157.66	159.16	164.43	165.18	165.18
5-Aug	157.66	157.66	158.41	163.68	165.18	165.18	165.18
6-Aug	165.18	165.18	165.18	165.18	165.18	165.18	165.18
7-Aug	165.18	165.18	165.18	165.18	165.18	165.18	165.18
8-Aug	157.66	157.66	157.66	159.92	165.18	165.18	165.18
9-Aug	82.14	82.59	95.10	157.66	157.66	158.41	159.92
10-Aug	81.01	81.69	82.59	136.81	157.66	157.66	157.66
11-Aug	80.11	80.78	81.46	82.59	157.66	157.66	157.66
12-Aug	79.66	80.33	81.23	82.59	136.81	157.66	157.66
13-Aug	165.18	165.18	165.18	165.18	165.18	165.18	165.18
14-Aug	157.66	157.66	159.92	164.43	165.18	165.18	165.18
15-Aug	157.66	157.66	157.66	158.41	162.92	165.18	165.18
16-Aug	163.68	165.18	165.18	165.18	165.18	165.18	165.18
17-Aug	157.66	157.66	157.66	159.16	163.68	165.18	165.18
18-Aug	115.95	157.66	157.66	157.66	160.67	162.92	165.18
19-Aug	82.59	82.59	157.66	157.66	157.66	159.92	162.17
20-Aug	82.36	82.59	115.95	157.66	157.66	158.41	160.67
21-Aug	82.14	82.59	95.10	157.66	157.66	158.41	159.92
22-Aug	81.91	82.36	82.59	157.66	157.66	157.66	159.16
23-Aug	81.69	82.36	82.59	157.66	157.66	157.66	158.41
24-Aug	81.91	82.36	82.59	157.66	157.66	157.66	159.16
25-Aug	82.36	82.59	115.95	157.66	157.66	158.41	160.67
26-Aug	82.36	82.59	115.95	157.66	157.66	158.41	160.67
27-Aug	82.36	82.59	115.95	157.66	157.66	158.41	160.67

Table A44, continued. Summer 2002 allocation scenario time series results for the fast generalist guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	82.59	115.95	157.66	157.66	159.16	162.17	163.68
29-Aug	160.67	162.17	165.18	165.18	165.18	165.18	165.18
30-Aug	157.66	157.66	158.41	163.68	165.18	165.18	165.18
31-Aug	136.81	157.66	157.66	157.66	161.42	164.43	165.18
1-Sep	82.59	95.10	157.66	157.66	157.66	160.67	162.17
2-Sep	81.23	81.91	82.59	157.66	157.66	157.66	157.66
3-Sep	80.33	81.01	81.69	82.59	157.66	157.66	157.66
4-Sep	80.11	80.78	81.46	82.59	157.66	157.66	157.66
5-Sep	79.43	79.88	80.78	82.14	115.95	157.66	157.66
6-Sep	78.31	78.98	79.88	81.23	82.59	95.10	157.66
7-Sep	79.66	80.33	81.23	82.59	136.81	157.66	157.66
8-Sep	81.01	81.46	82.36	115.95	157.66	157.66	157.66
9-Sep	80.56	81.01	81.91	95.10	157.66	157.66	157.66
10-Sep	80.11	80.78	81.46	82.59	157.66	157.66	157.66
11-Sep	79.66	80.11	81.01	82.36	136.81	157.66	157.66
12-Sep	78.98	79.66	80.33	81.91	82.59	157.66	157.66
13-Sep	78.31	78.98	79.88	81.23	82.59	95.10	157.66
14-Sep	78.76	79.43	80.11	81.69	82.59	136.81	157.66
15-Sep	79.66	80.11	81.01	82.36	136.81	157.66	157.66
16-Sep	80.56	81.01	81.91	95.10	157.66	157.66	157.66
17-Sep	80.33	81.01	81.69	82.59	157.66	157.66	157.66
18-Sep	79.43	79.88	80.78	82.14	115.95	157.66	157.66
19-Sep	79.66	80.11	81.01	82.36	136.81	157.66	157.66
20-Sep	79.66	80.11	81.01	82.36	136.81	157.66	157.66
21-Sep	157.66	157.66	158.41	163.68	165.18	165.18	165.18
22-Sep	159.16	160.67	163.68	165.18	165.18	165.18	165.18
23-Sep	157.66	158.41	161.42	165.18	165.18	165.18	165.18
24-Sep	157.66	157.66	158.41	163.68	165.18	165.18	165.18
25-Sep	165.18	165.18	165.18	165.18	165.18	165.18	165.18
26-Sep	159.16	157.66	157.66	157.66	157.66	157.66	157.66
27-Sep	100.61	97.60	91.60	82.59	81.96	81.60	81.42
28-Sep	1.20	0.60	0.00	0.00	0.00	0.00	0.00
29-Sep	33.04	33.04	33.04	33.04	33.04	33.04	32.92
30-Sep	74.24	72.79	70.87	67.99	65.11	63.18	61.74

Table A45. Summer 2002 allocation scenario time series results for the pool – run guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	2709.16	2699.95	2681.52	2649.28	2621.64	2583.50	2554.57
2-Jun	2870.38	2856.56	2838.14	2810.50	2782.86	2764.44	2750.62
3-Jun	3063.85	3050.03	3031.60	3003.97	2976.33	2957.90	2944.08
4-Jun	3090.93	3089.30	3087.68	3083.89	3080.64	3078.47	3077.39
5-Jun	3088.76	3087.14	3084.97	3081.72	3078.47	3076.31	3074.68
6-Jun	3079.02	3077.39	3075.23	3063.85	3036.21	3017.78	3003.97
7-Jun	3080.64	3079.56	3077.39	3073.60	3050.03	3031.60	3022.39
8-Jun	3077.39	3075.77	3074.14	3050.03	3022.39	3003.97	2994.75
9-Jun	3173.01	3157.39	3141.77	3105.34	3097.42	3095.26	3094.18
10-Jun	3251.09	3235.47	3214.65	3183.42	3152.18	3131.36	3115.75
11-Jun	3329.17	3318.76	3297.94	3261.50	3230.27	3209.44	3199.03
12-Jun	3363.58	3362.22	3360.85	3329.17	3297.94	3277.11	3266.70
13-Jun	3355.20	3344.78	3323.96	3292.73	3256.29	3235.47	3225.06
14-Jun	3091.47	3089.84	3088.22	3084.43	3081.18	3079.02	3077.93
15-Jun	3054.64	3040.82	3027.00	2994.75	2967.12	2948.69	2939.48
16-Jun	2953.30	2939.48	2921.05	2893.41	2865.78	2847.35	2833.53
17-Jun	3167.80	3157.39	3136.57	3100.13	3096.88	3094.72	3093.63
18-Jun	3261.50	3251.09	3230.27	3199.03	3162.60	3141.77	3131.36
19-Jun	3349.99	3339.58	3318.76	3287.52	3251.09	3235.47	3219.85
20-Jun	3364.94	3364.03	3362.22	3349.99	3313.55	3297.94	3282.32
21-Jun	3245.88	3230.27	3209.44	3178.21	3146.98	3126.16	3110.54
22-Jun	3355.20	3344.78	3323.96	3292.73	3256.29	3235.47	3225.06
23-Jun	3431.43	3409.27	3387.10	3363.12	3360.40	3339.58	3329.17
24-Jun	3543.94	3534.78	3502.79	3431.43	3387.10	3364.49	3363.58
25-Jun	3549.88	3539.42	3542.43	3524.12	3460.14	3424.04	3401.88
26-Jun	3621.61	3597.70	3549.88	3541.68	3524.12	3492.13	3460.14
27-Jun	3645.52	3621.61	3573.79	3540.93	3545.44	3502.79	3481.47
28-Jun	3173.01	3157.39	3141.77	3105.34	3097.42	3095.26	3094.18
29-Jun	3199.03	3188.62	3167.80	3131.36	3100.13	3097.96	3096.88
30-Jun	3079.56	3078.47	3076.31	3073.06	3040.82	3027.00	3013.18
1-Jul	3544.69	3534.78	3492.13	3424.04	3379.72	3364.03	3363.12
2-Jul	3363.58	3362.22	3360.85	3329.17	3297.94	3277.11	3266.70
3-Jul	3394.49	3372.33	3364.03	3360.85	3334.37	3313.55	3303.14
4-Jul	3549.88	3539.42	3542.43	3524.12	3460.14	3424.04	3401.88
5-Jul	3679.09	3686.84	3680.97	3663.34	3609.65	3561.83	3538.67
6-Jul	3612.01	3626.18	3648.09	3686.84	3678.03	3666.28	3660.41
7-Jul	3671.90	3632.52	3602.57	3630.90	3679.09	3686.84	3683.90
8-Jul	3788.86	3770.37	3691.60	3597.85	3630.90	3648.09	3671.34
9-Jul	3782.84	3785.24	3790.06	3671.90	3607.29	3621.46	3635.62
10-Jul	3779.83	3780.43	3785.24	3750.67	3632.52	3602.57	3616.74
11-Jul	3787.06	3783.44	3779.22	3787.65	3711.29	3632.52	3593.13
12-Jul	3790.68	3785.25	3778.02	3785.24	3750.67	3671.90	3612.82
13-Jul	3671.90	3632.52	3602.57	3630.90	3679.09	3686.84	3683.90

Table A45, continued. Summer 2002 allocation scenario time series results for the pool – run guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
14-Jul	3549.88	3539.42	3542.43	3524.12	3460.14	3424.04	3401.88
15-Jul	3537.92	3540.18	3543.18	3513.45	3449.48	3416.66	3394.49
16-Jul	3635.62	3648.09	3679.09	3683.90	3666.28	3645.52	3609.65
17-Jul	3537.92	3540.18	3543.18	3513.45	3449.48	3416.66	3394.49
18-Jul	3678.03	3669.22	3660.41	3585.74	3539.42	3542.43	3543.94
19-Jul	3621.46	3630.90	3655.84	3686.84	3672.16	3660.41	3645.52
20-Jul	3711.29	3671.90	3593.13	3626.18	3663.59	3686.84	3686.84
21-Jul	3787.65	3790.06	3711.29	3597.85	3626.18	3648.09	3663.59
22-Jul	3785.24	3788.86	3750.67	3612.82	3616.74	3635.62	3648.09
23-Jul	3782.84	3786.45	3770.37	3652.21	3607.29	3626.18	3640.34
24-Jul	3782.84	3785.24	3790.06	3671.90	3607.29	3621.46	3635.62
25-Jul	3784.04	3787.65	3750.67	3632.52	3612.01	3630.90	3648.09
26-Jul	3782.84	3785.24	3790.06	3671.90	3607.29	3621.46	3635.62
27-Jul	3597.85	3607.29	3626.18	3663.59	3686.84	3675.09	3669.22
28-Jul	3666.28	3660.41	3621.61	3549.88	3542.43	3544.69	3524.12
29-Jul	3409.27	3394.49	3364.94	3362.22	3344.78	3329.17	3313.55
30-Jul	3363.58	3362.22	3360.85	3329.17	3297.94	3277.11	3266.70
31-Jul	3549.88	3538.67	3541.68	3534.78	3460.14	3431.43	3409.27
1-Aug	3686.84	3686.84	3675.09	3645.52	3573.79	3538.67	3540.18
2-Aug	3786.45	3790.06	3730.98	3593.13	3621.46	3640.34	3655.84
3-Aug	3787.06	3783.44	3779.22	3787.65	3711.29	3632.52	3593.13
4-Aug	3796.10	3792.48	3785.25	3780.43	3788.86	3730.98	3691.60
5-Aug	3787.06	3783.44	3779.22	3787.65	3711.29	3632.52	3593.13
6-Aug	3671.90	3632.52	3602.57	3630.90	3679.09	3686.84	3683.90
7-Aug	3770.37	3711.29	3632.52	3612.01	3640.34	3671.34	3686.84
8-Aug	3794.29	3790.68	3783.44	3781.63	3790.06	3730.98	3671.90
9-Aug	3566.58	3573.34	3589.21	3796.10	3783.44	3779.22	3781.63
10-Aug	3549.69	3559.83	3573.34	3727.14	3792.48	3785.25	3779.83
11-Aug	3538.88	3546.32	3556.45	3558.33	3796.10	3792.48	3788.87
12-Aug	3537.52	3539.56	3553.07	3573.34	3727.14	3796.10	3790.68
13-Aug	3750.67	3691.60	3632.52	3616.74	3648.09	3679.09	3686.84
14-Aug	3783.44	3779.83	3781.63	3788.86	3671.90	3612.82	3602.57
15-Aug	3796.10	3794.29	3788.87	3779.22	3786.45	3770.37	3730.98
16-Aug	3787.65	3790.06	3711.29	3597.85	3626.18	3648.09	3663.59
17-Aug	3796.10	3794.29	3787.06	3780.43	3787.65	3750.67	3711.29
18-Aug	3658.17	3796.10	3794.29	3783.44	3782.84	3786.45	3790.06
19-Aug	3573.34	3550.83	3796.10	3790.68	3779.83	3781.63	3785.24
20-Aug	3569.96	3565.84	3658.17	3794.29	3781.64	3779.22	3782.84
21-Aug	3566.58	3573.34	3589.21	3796.10	3783.44	3779.22	3781.63
22-Aug	3563.21	3569.96	3550.83	3796.10	3785.25	3778.02	3780.43
23-Aug	3559.83	3569.96	3558.33	3796.10	3787.06	3779.83	3779.22
24-Aug	3563.21	3569.96	3550.83	3796.10	3785.25	3778.02	3780.43
25-Aug	3569.96	3565.84	3658.17	3794.29	3781.64	3779.22	3782.84
26-Aug	3569.96	3565.84	3658.17	3794.29	3781.64	3779.22	3782.84

Table A45, continued. Summer 2002 allocation scenario time series results for the pool – run guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
27-Aug	3569.96	3565.84	3658.17	3794.29	3781.64	3779.22	3782.84
28-Aug	3550.83	3658.17	3796.10	3785.25	3780.43	3785.24	3787.65
29-Aug	3782.84	3785.24	3790.06	3671.90	3607.29	3621.46	3635.62
30-Aug	3787.06	3783.44	3779.22	3787.65	3711.29	3632.52	3593.13
31-Aug	3727.14	3796.10	3790.68	3779.83	3784.04	3788.86	3750.67
1-Sep	3565.84	3589.21	3796.10	3788.87	3778.02	3782.84	3785.24
2-Sep	3553.07	3563.21	3565.84	3796.10	3790.68	3783.44	3778.02
3-Sep	3539.56	3549.69	3559.83	3550.83	3796.10	3790.68	3787.06
4-Sep	3538.88	3546.32	3556.45	3558.33	3796.10	3792.48	3788.87
5-Sep	3536.84	3538.20	3546.32	3566.58	3658.17	3796.10	3794.29
6-Sep	3533.43	3535.47	3538.20	3553.07	3573.34	3589.21	3796.10
7-Sep	3537.52	3539.56	3553.07	3573.34	3727.14	3796.10	3790.68
8-Sep	3549.69	3556.45	3569.96	3658.17	3792.48	3787.06	3781.64
9-Sep	3542.94	3549.69	3563.21	3589.21	3796.10	3788.87	3785.25
10-Sep	3538.88	3546.32	3556.45	3558.33	3796.10	3792.48	3788.87
11-Sep	3537.52	3538.88	3549.69	3569.96	3727.14	3796.10	3792.48
12-Sep	3535.47	3537.52	3539.56	3563.21	3550.83	3796.10	3796.10
13-Sep	3533.43	3535.47	3538.20	3553.07	3573.34	3589.21	3796.10
14-Sep	3534.79	3536.84	3538.88	3559.83	3558.33	3727.14	3796.10
15-Sep	3537.52	3538.88	3549.69	3569.96	3727.14	3796.10	3792.48
16-Sep	3542.94	3549.69	3563.21	3589.21	3796.10	3788.87	3785.25
17-Sep	3539.56	3549.69	3559.83	3550.83	3796.10	3790.68	3787.06
18-Sep	3536.84	3538.20	3546.32	3566.58	3658.17	3796.10	3794.29
19-Sep	3537.52	3538.88	3549.69	3569.96	3727.14	3796.10	3792.48
20-Sep	3537.52	3538.88	3549.69	3569.96	3727.14	3796.10	3792.48
21-Sep	3787.06	3783.44	3779.22	3787.65	3711.29	3632.52	3593.13
22-Sep	3780.43	3782.84	3787.65	3711.29	3597.85	3616.74	3626.18
23-Sep	3781.64	3779.22	3784.04	3770.37	3652.21	3597.85	3612.01
24-Sep	3787.06	3783.44	3779.22	3787.65	3711.29	3632.52	3593.13
25-Sep	3635.62	3648.09	3679.09	3683.90	3666.28	3645.52	3609.65
26-Sep	3543.94	3534.78	3502.79	3431.43	3387.10	3364.49	3363.58
27-Sep	3162.60	3152.18	3131.36	3100.13	3096.34	3094.18	3093.09
28-Sep	702.94	699.18	0.00	0.00	0.00	0.00	0.00
29-Sep	1542.28	1516.00	1463.43	1371.43	1292.58	1240.01	1223.99
30-Sep	3036.21	3022.39	3003.97	2976.33	2948.69	2930.27	2916.45

Table A46. Summer 2002 allocation scenario time series results for the pool – cover guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	1803.10	1793.78	1775.15	1742.54	1714.60	1714.68	1724.08
2-Jun	1966.13	1952.15	1933.52	1905.57	1877.63	1858.99	1845.02
3-Jun	2161.76	2147.79	2129.16	2101.21	2073.26	2054.63	2040.66
4-Jun	2125.21	2129.38	2133.55	2143.28	2151.62	2157.18	2159.96
5-Jun	2130.77	2134.94	2140.50	2148.84	2157.18	2162.74	2166.91
6-Jun	2155.79	2159.96	2165.52	2161.76	2133.82	2115.18	2101.21
7-Jun	2151.62	2154.40	2159.96	2169.69	2147.79	2129.16	2119.84
8-Jun	2159.96	2164.13	2168.30	2147.79	2119.84	2101.21	2091.89
9-Jun	2027.67	2043.51	2059.35	2096.30	2108.53	2114.09	2116.87
10-Jun	1948.48	1964.32	1985.43	2017.11	2048.79	2069.90	2085.74
11-Jun	1869.29	1879.85	1900.96	1937.92	1969.60	1990.71	2001.27
12-Jun	1815.43	1824.93	1834.44	1869.29	1900.96	1922.08	1932.64
13-Jun	1842.89	1853.45	1874.57	1906.24	1943.20	1964.32	1974.87
14-Jun	2123.82	2127.99	2132.16	2141.89	2150.23	2155.79	2158.57
15-Jun	2152.45	2138.47	2124.50	2091.89	2063.95	2045.31	2036.00
16-Jun	2049.97	2036.00	2017.37	1989.42	1961.47	1942.84	1928.86
17-Jun	2032.95	2043.51	2064.62	2101.58	2109.92	2115.48	2118.26
18-Jun	1937.92	1948.48	1969.60	2001.27	2038.23	2059.35	2069.90
19-Jun	1848.17	1858.73	1879.85	1911.52	1948.48	1964.32	1980.15
20-Jun	1805.92	1812.26	1824.93	1848.17	1885.13	1900.96	1916.80
21-Jun	1953.76	1969.60	1990.71	2022.39	2054.07	2075.18	2091.02
22-Jun	1842.89	1853.45	1874.57	1906.24	1943.20	1964.32	1974.87
23-Jun	1759.22	1774.79	1790.35	1818.60	1837.61	1858.73	1869.29
24-Jun	1730.13	1741.85	1745.91	1759.22	1790.35	1809.09	1815.43
25-Jun	1687.46	1699.03	1719.76	1743.21	1751.32	1764.41	1779.98
26-Jun	1680.24	1682.65	1687.46	1714.58	1743.21	1747.27	1751.32
27-Jun	1677.83	1680.24	1685.05	1709.40	1740.50	1745.91	1748.62
28-Jun	2027.67	2043.51	2059.35	2096.30	2108.53	2114.09	2116.87
29-Jun	2001.27	2011.83	2032.95	2069.90	2101.58	2107.14	2109.92
30-Jun	2154.40	2157.18	2162.74	2171.08	2138.47	2124.50	2110.53
1-Jul	1735.32	1741.85	1747.27	1764.41	1795.54	1812.26	1818.60
2-Jul	1815.43	1824.93	1834.44	1869.29	1900.96	1922.08	1932.64
3-Jul	1785.16	1800.73	1812.26	1834.44	1864.01	1885.13	1895.68
4-Jul	1687.46	1699.03	1719.76	1743.21	1751.32	1764.41	1779.98
5-Jul	1592.16	1642.99	1674.66	1676.14	1681.44	1686.25	1693.84
6-Jul	1438.19	1466.09	1513.62	1627.39	1674.91	1675.89	1676.38
7-Jul	1385.48	1393.24	1419.60	1475.38	1592.16	1642.99	1674.42
8-Jul	1353.15	1366.09	1381.61	1410.30	1475.38	1513.62	1572.53
9-Jul	1307.84	1325.97	1362.21	1385.48	1428.89	1456.79	1484.68
10-Jul	1248.12	1289.72	1325.97	1369.97	1393.24	1419.60	1447.49
11-Jul	1154.20	1201.16	1280.66	1344.09	1377.73	1393.24	1401.00
12-Jul	1107.23	1177.68	1271.60	1325.97	1369.97	1385.48	1397.12
13-Jul	1385.48	1393.24	1419.60	1475.38	1592.16	1642.99	1674.42
14-Jul	1687.46	1699.03	1719.76	1743.21	1751.32	1764.41	1779.98

Table A46, continued. Summer 2002 allocation scenario time series results for the pool – cover guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	1688.66	1704.21	1724.95	1744.56	1752.68	1769.60	1785.16
16-Jul	1484.68	1513.62	1592.16	1674.42	1675.89	1677.83	1681.44
17-Jul	1688.66	1704.21	1724.95	1744.56	1752.68	1769.60	1785.16
18-Jul	1674.91	1675.65	1676.38	1683.85	1699.03	1719.76	1730.13
19-Jul	1456.79	1475.38	1533.25	1658.58	1675.40	1676.38	1677.83
20-Jul	1377.73	1385.48	1401.00	1466.09	1552.89	1627.39	1658.58
21-Jul	1344.09	1362.21	1377.73	1410.30	1466.09	1513.62	1552.89
22-Jul	1325.97	1353.15	1369.97	1397.12	1447.49	1484.68	1513.62
23-Jul	1307.84	1335.03	1366.09	1389.36	1428.89	1466.09	1493.98
24-Jul	1307.84	1325.97	1362.21	1385.48	1428.89	1456.79	1484.68
25-Jul	1316.91	1344.09	1369.97	1393.24	1438.19	1475.38	1513.62
26-Jul	1307.84	1325.97	1362.21	1385.48	1428.89	1456.79	1484.68
27-Jul	1410.30	1428.89	1466.09	1552.89	1674.17	1675.15	1675.65
28-Jul	1675.89	1676.38	1680.24	1687.46	1719.76	1735.32	1743.21
29-Jul	1774.79	1785.16	1805.92	1824.93	1853.45	1869.29	1885.13
30-Jul	1815.43	1824.93	1834.44	1869.29	1900.96	1922.08	1932.64
31-Jul	1687.46	1693.84	1714.58	1741.85	1751.32	1759.22	1774.79
1-Aug	1642.99	1674.17	1675.15	1677.83	1685.05	1693.84	1704.21
2-Aug	1335.03	1362.21	1373.85	1401.00	1456.79	1493.98	1533.25
3-Aug	1154.20	1201.16	1280.66	1344.09	1377.73	1393.24	1401.00
4-Aug	1036.79	1083.75	1177.68	1289.72	1353.15	1373.85	1381.61
5-Aug	1154.20	1201.16	1280.66	1344.09	1377.73	1393.24	1401.00
6-Aug	1385.48	1393.24	1419.60	1475.38	1592.16	1642.99	1674.42
7-Aug	1366.09	1377.73	1393.24	1438.19	1493.98	1572.53	1627.39
8-Aug	1060.27	1107.23	1201.16	1298.78	1362.21	1373.85	1385.48
9-Aug	886.38	897.43	955.89	1036.79	1201.16	1280.66	1298.78
10-Aug	858.77	875.34	897.43	1010.86	1083.75	1177.68	1248.12
11-Aug	835.21	853.25	869.82	922.12	1037.82	1083.75	1130.71
12-Aug	821.23	842.20	864.29	897.43	1010.86	1036.79	1107.23
13-Aug	1369.97	1381.61	1393.24	1447.49	1513.62	1592.16	1627.39
14-Aug	1201.16	1248.12	1298.78	1353.15	1385.48	1397.12	1419.60
15-Aug	1037.82	1060.27	1130.71	1280.66	1335.03	1366.09	1373.85
16-Aug	1344.09	1362.21	1377.73	1410.30	1466.09	1513.62	1552.89
17-Aug	1037.31	1060.27	1154.20	1289.72	1344.09	1369.97	1377.73
18-Aug	983.37	1038.34	1060.27	1201.16	1307.84	1335.03	1362.21
19-Aug	897.43	934.46	1038.34	1107.23	1248.12	1298.78	1325.97
20-Aug	891.91	909.77	983.37	1060.27	1224.64	1280.66	1307.84
21-Aug	886.38	897.43	955.89	1036.79	1201.16	1280.66	1298.78
22-Aug	880.86	891.91	934.46	1036.79	1177.68	1271.60	1289.72
23-Aug	875.34	891.91	922.12	1037.31	1154.20	1248.12	1280.66
24-Aug	880.86	891.91	934.46	1036.79	1177.68	1271.60	1289.72
25-Aug	891.91	909.77	983.37	1060.27	1224.64	1280.66	1307.84
26-Aug	891.91	909.77	983.37	1060.27	1224.64	1280.66	1307.84
27-Aug	891.91	909.77	983.37	1060.27	1224.64	1280.66	1307.84

Table A46, continued. Summer 2002 allocation scenario time series results for the pool – cover guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	934.46	983.37	1037.31	1177.68	1289.72	1325.97	1344.09
29-Aug	1307.84	1325.97	1362.21	1385.48	1428.89	1456.79	1484.68
30-Aug	1154.20	1201.16	1280.66	1344.09	1377.73	1393.24	1401.00
31-Aug	1010.86	1037.31	1107.23	1248.12	1316.91	1353.15	1369.97
1-Sep	909.77	955.89	1038.34	1130.71	1271.60	1307.84	1325.97
2-Sep	864.29	880.86	909.77	1038.34	1107.23	1201.16	1271.60
3-Sep	842.20	858.77	875.34	934.46	1037.31	1107.23	1154.20
4-Sep	835.21	853.25	869.82	922.12	1037.82	1083.75	1130.71
5-Sep	814.24	828.22	853.25	886.38	983.37	1037.82	1060.27
6-Sep	779.29	800.26	828.22	864.29	897.43	955.89	1038.34
7-Sep	821.23	842.20	864.29	897.43	1010.86	1036.79	1107.23
8-Sep	858.77	869.82	891.91	983.37	1083.75	1154.20	1224.64
9-Sep	847.72	858.77	880.86	955.89	1036.79	1130.71	1177.68
10-Sep	835.21	853.25	869.82	922.12	1037.82	1083.75	1130.71
11-Sep	821.23	835.21	858.77	891.91	1010.86	1037.31	1083.75
12-Sep	800.26	821.23	842.20	880.86	934.46	1038.34	1037.31
13-Sep	779.29	800.26	828.22	864.29	897.43	955.89	1038.34
14-Sep	793.27	814.24	835.21	875.34	922.12	1010.86	1037.82
15-Sep	821.23	835.21	858.77	891.91	1010.86	1037.31	1083.75
16-Sep	847.72	858.77	880.86	955.89	1036.79	1130.71	1177.68
17-Sep	842.20	858.77	875.34	934.46	1037.31	1107.23	1154.20
18-Sep	814.24	828.22	853.25	886.38	983.37	1037.82	1060.27
19-Sep	821.23	835.21	858.77	891.91	1010.86	1037.31	1083.75
20-Sep	821.23	835.21	858.77	891.91	1010.86	1037.31	1083.75
21-Sep	1154.20	1201.16	1280.66	1344.09	1377.73	1393.24	1401.00
22-Sep	1289.72	1307.84	1344.09	1377.73	1410.30	1447.49	1466.09
23-Sep	1224.64	1280.66	1316.91	1366.09	1389.36	1410.30	1438.19
24-Sep	1154.20	1201.16	1280.66	1344.09	1377.73	1393.24	1401.00
25-Sep	1484.68	1513.62	1592.16	1674.42	1675.89	1677.83	1681.44
26-Sep	1730.13	1741.85	1745.91	1759.22	1790.35	1809.09	1815.43
27-Sep	2038.23	2048.79	2069.90	2101.58	2111.31	2116.87	2119.65
28-Sep	1323.40	1318.85	0.00	0.00	0.00	0.00	0.00
29-Sep	1796.09	1789.07	1775.01	1750.42	1729.33	1715.28	1712.39
30-Sep	2133.82	2119.84	2101.21	2073.26	2045.31	2026.68	2012.71

Table A47. Summer 2002 allocation scenario time series results for the algae – midge guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
1-Jun	2260.42	2252.79	2237.53	2210.82	2187.93	2153.69	2127.09
2-Jun	2393.96	2382.51	2367.25	2344.36	2321.47	2306.21	2294.76
3-Jun	2554.20	2542.75	2527.49	2504.60	2481.71	2466.45	2455.00
4-Jun	2565.61	2565.26	2564.92	2564.12	2563.43	2562.97	2562.75
5-Jun	2565.15	2564.80	2564.35	2563.66	2562.97	2562.52	2562.17
6-Jun	2563.09	2562.75	2562.29	2554.20	2531.31	2516.05	2504.60
7-Jun	2563.43	2563.20	2562.75	2561.95	2542.75	2527.49	2519.86
8-Jun	2562.75	2562.40	2562.06	2542.75	2519.86	2504.60	2496.97
9-Jun	3566.38	3352.35	3138.31	2638.90	2566.98	2566.52	2566.29
10-Jun	4636.56	4422.53	4137.15	3709.07	3281.00	2995.62	2781.59
11-Jun	5706.74	5564.05	5278.67	4779.25	4351.18	4065.80	3923.11
12-Jun	6040.79	6081.09	6121.38	5706.74	5278.67	4993.29	4850.60
13-Jun	6063.47	5920.77	5635.39	5207.32	4707.91	4422.53	4279.84
14-Jun	2565.72	2565.38	2565.03	2564.23	2563.55	2563.09	2562.86
15-Jun	2546.57	2535.12	2523.68	2496.97	2474.08	2458.82	2451.19
16-Jun	2462.63	2451.19	2435.93	2413.03	2390.14	2374.88	2363.44
17-Jun	3495.04	3352.35	3066.97	2567.55	2566.86	2566.41	2566.18
18-Jun	4779.25	4636.56	4351.18	3923.11	3423.69	3138.31	2995.62
19-Jun	5992.12	5849.43	5564.05	5135.98	4636.56	4422.53	4208.49
20-Jun	6000.50	6027.36	6081.09	5992.12	5492.70	5278.67	5064.63
21-Jun	4565.22	4351.18	4065.80	3637.73	3209.66	2924.28	2710.24
22-Jun	6063.47	5920.77	5635.39	5207.32	4707.91	4422.53	4279.84
23-Jun	5905.58	5937.22	5968.86	6054.22	6134.81	5849.43	5706.74
24-Jun	6078.51	5844.77	5861.53	5905.58	5968.86	6013.93	6040.79
25-Jun	7262.06	6796.48	6317.83	5850.36	5883.86	5916.12	5947.77
26-Jun	8619.64	8167.12	7262.06	6437.50	5850.36	5867.11	5883.86
27-Jun	9072.17	8619.64	7714.59	6557.16	5839.19	5861.53	5872.69
28-Jun	3566.38	3352.35	3138.31	2638.90	2566.98	2566.52	2566.29
29-Jun	3923.11	3780.42	3495.04	2995.62	2567.55	2567.09	2566.86
30-Jun	2563.20	2562.97	2562.52	2561.83	2535.12	2523.68	2512.23
1-Jul	5958.85	5844.77	5867.11	5916.12	5979.41	6027.36	6054.22
2-Jul	6040.79	6081.09	6121.38	5706.74	5278.67	4993.29	4850.60
3-Jul	5958.31	5989.95	6027.36	6121.38	5778.08	5492.70	5350.01
4-Jul	7262.06	6796.48	6317.83	5850.36	5883.86	5916.12	5947.77
5-Jul	9280.23	9163.89	9137.32	9258.15	8393.38	7488.33	6916.14
6-Jul	9992.02	9759.84	9478.18	9197.32	9157.46	9238.01	9278.29
7-Jul	11216.62	10759.10	10146.80	9682.45	9280.23	9163.89	9117.18
8-Jul	13045.42	12360.42	11445.38	10224.19	9682.45	9478.18	9329.72
9-Jul	15326.61	14414.13	12589.18	11216.62	10069.41	9837.23	9605.06
10-Jul	17479.58	16239.08	14414.13	12131.66	10759.10	10146.80	9914.63
11-Jul	18791.67	18135.63	16695.32	13501.66	11674.14	10759.10	10301.58
12-Jul	19447.71	18463.65	17151.56	14414.13	12131.66	11216.62	10530.34
13-Jul	11216.62	10759.10	10146.80	9682.45	9280.23	9163.89	9117.18
14-Jul	7262.06	6796.48	6317.83	5850.36	5883.86	5916.12	5947.77

Table A47, continued. Summer 2002 allocation scenario time series results for the algae – midge guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
15-Jul	7035.80	6676.82	6198.17	5855.94	5889.45	5926.67	5958.31
16-Jul	9605.06	9478.18	9280.23	9117.18	9238.01	9072.17	8393.38
17-Jul	7035.80	6676.82	6198.17	5855.94	5889.45	5926.67	5958.31
18-Jul	9157.46	9217.87	9278.29	7940.85	6796.48	6317.83	6078.51
19-Jul	9837.23	9682.45	9428.69	9130.47	9197.73	9278.29	9072.17
20-Jul	11674.14	11216.62	10301.58	9759.84	9379.21	9197.32	9130.47
21-Jul	13501.66	12589.18	11674.14	10224.19	9759.84	9478.18	9379.21
22-Jul	14414.13	13045.42	12131.66	10530.34	9914.63	9605.06	9478.18
23-Jul	15326.61	13957.89	12360.42	10987.86	10069.41	9759.84	9527.67
24-Jul	15326.61	14414.13	12589.18	11216.62	10069.41	9837.23	9605.06
25-Jul	14870.37	13501.66	12131.66	10759.10	9992.02	9682.45	9478.18
26-Jul	15326.61	14414.13	12589.18	11216.62	10069.41	9837.23	9605.06
27-Jul	10224.19	10069.41	9759.84	9379.21	9097.04	9177.60	9217.87
28-Jul	9238.01	9278.29	8619.64	7262.06	6317.83	5958.85	5850.36
29-Jul	5937.22	5958.31	6000.50	6081.09	5920.77	5706.74	5492.70
30-Jul	6040.79	6081.09	6121.38	5706.74	5278.67	4993.29	4850.60
31-Jul	7262.06	6916.14	6437.50	5844.77	5883.86	5905.58	5937.22
1-Aug	9163.89	9097.04	9177.60	9072.17	7714.59	6916.14	6676.82
2-Aug	13957.89	12589.18	11902.90	10301.58	9837.23	9527.67	9428.69
3-Aug	18791.67	18135.63	16695.32	13501.66	11674.14	10759.10	10301.58
4-Aug	20431.78	19775.74	18463.65	16239.08	13045.42	11902.90	11445.38
5-Aug	18791.67	18135.63	16695.32	13501.66	11674.14	10759.10	10301.58
6-Aug	11216.62	10759.10	10146.80	9682.45	9280.23	9163.89	9117.18
7-Aug	12360.42	11674.14	10759.10	9992.02	9527.67	9329.72	9197.32
8-Aug	20103.76	19447.71	18135.63	15782.85	12589.18	11902.90	11216.62
9-Aug	34963.48	34743.29	31328.86	20431.78	18135.63	16695.32	15782.85
10-Aug	35513.94	35183.66	34743.29	24341.98	19775.74	18463.65	17479.58
11-Aug	36023.96	35624.03	35293.75	33967.78	20709.62	19775.74	19119.69
12-Aug	36383.43	35844.22	35403.85	34743.29	24341.98	20431.78	19447.71
13-Aug	12131.66	11445.38	10759.10	9914.63	9478.18	9280.23	9197.32
14-Aug	18135.63	17479.58	15782.85	13045.42	11216.62	10530.34	10146.80
15-Aug	20709.62	20103.76	19119.69	16695.32	13957.89	12360.42	11902.90
16-Aug	13501.66	12589.18	11674.14	10224.19	9759.84	9478.18	9379.21
17-Aug	20570.70	20103.76	18791.67	16239.08	13501.66	12131.66	11674.14
18-Aug	27835.42	20848.54	20103.76	18135.63	15326.61	13957.89	12589.18
19-Aug	34743.29	33580.02	20848.54	19447.71	17479.58	15782.85	14414.13
20-Aug	34853.38	34355.54	27835.42	20103.76	17807.60	16695.32	15326.61
21-Aug	34963.48	34743.29	31328.86	20431.78	18135.63	16695.32	15782.85
22-Aug	35073.57	34853.38	33580.02	20431.78	18463.65	17151.56	16239.08
23-Aug	35183.66	34853.38	33967.78	20570.70	18791.67	17479.58	16695.32
24-Aug	35073.57	34853.38	33580.02	20431.78	18463.65	17151.56	16239.08
25-Aug	34853.38	34355.54	27835.42	20103.76	17807.60	16695.32	15326.61
26-Aug	34853.38	34355.54	27835.42	20103.76	17807.60	16695.32	15326.61
27-Aug	34853.38	34355.54	27835.42	20103.76	17807.60	16695.32	15326.61

Table A47, continued. Summer 2002 allocation scenario time series results for the algae – midge guild at the Route 648 study site. The incremental allocation scenarios range from no restriction (site daily mean discharge, Q, plus 0% of the NFSR 2002 water use estimate, 25.3 cfs) to maximum restriction (site daily mean discharge, Q, plus 100% of the NFSR 2002 water use estimate, 25.3 cfs).

Date	Site Q	Microhabitat Index					
		+ 0.10 WD	+ 0.25 WD	+ 0.50 WD	+ 0.75 WD	+ 0.90 WD	+ 1.00 WD
28-Aug	33580.02	27835.42	20570.70	18463.65	16239.08	14414.13	13501.66
29-Aug	15326.61	14414.13	12589.18	11216.62	10069.41	9837.23	9605.06
30-Aug	18791.67	18135.63	16695.32	13501.66	11674.14	10759.10	10301.58
31-Aug	24341.98	20570.70	19447.71	17479.58	14870.37	13045.42	12131.66
1-Sep	34355.54	31328.86	20848.54	19119.69	17151.56	15326.61	14414.13
2-Sep	35403.85	35073.57	34355.54	20848.54	19447.71	18135.63	17151.56
3-Sep	35844.22	35513.94	35183.66	33580.02	20570.70	19447.71	18791.67
4-Sep	36023.96	35624.03	35293.75	33967.78	20709.62	19775.74	19119.69
5-Sep	36563.17	36203.69	35624.03	34963.48	27835.42	20709.62	20103.76
6-Sep	37461.85	36922.64	36203.69	35403.85	34743.29	31328.86	20848.54
7-Sep	36383.43	35844.22	35403.85	34743.29	24341.98	20431.78	19447.71
8-Sep	35513.94	35293.75	34853.38	27835.42	19775.74	18791.67	17807.60
9-Sep	35734.13	35513.94	35073.57	31328.86	20431.78	19119.69	18463.65
10-Sep	36023.96	35624.03	35293.75	33967.78	20709.62	19775.74	19119.69
11-Sep	36383.43	36023.96	35513.94	34853.38	24341.98	20570.70	19775.74
12-Sep	36922.64	36383.43	35844.22	35073.57	33580.02	20848.54	20570.70
13-Sep	37461.85	36922.64	36203.69	35403.85	34743.29	31328.86	20848.54
14-Sep	37102.38	36563.17	36023.96	35183.66	33967.78	24341.98	20709.62
15-Sep	36383.43	36023.96	35513.94	34853.38	24341.98	20570.70	19775.74
16-Sep	35734.13	35513.94	35073.57	31328.86	20431.78	19119.69	18463.65
17-Sep	35844.22	35513.94	35183.66	33580.02	20570.70	19447.71	18791.67
18-Sep	36563.17	36203.69	35624.03	34963.48	27835.42	20709.62	20103.76
19-Sep	36383.43	36023.96	35513.94	34853.38	24341.98	20570.70	19775.74
20-Sep	36383.43	36023.96	35513.94	34853.38	24341.98	20570.70	19775.74
21-Sep	18791.67	18135.63	16695.32	13501.66	11674.14	10759.10	10301.58
22-Sep	16239.08	15326.61	13501.66	11674.14	10224.19	9914.63	9759.84
23-Sep	17807.60	16695.32	14870.37	12360.42	10987.86	10224.19	9992.02
24-Sep	18791.67	18135.63	16695.32	13501.66	11674.14	10759.10	10301.58
25-Sep	9605.06	9478.18	9280.23	9117.18	9238.01	9072.17	8393.38
26-Sep	6078.51	5844.77	5861.53	5905.58	5968.86	6013.93	6040.79
27-Sep	3423.69	3281.00	2995.62	2567.55	2566.75	2566.29	2566.06
28-Sep	586.11	588.51	0.00	0.00	0.00	0.00	0.00
29-Sep	1550.40	1547.70	1542.30	1532.85	1524.74	1519.34	1485.77
30-Sep	2531.31	2519.86	2504.60	2481.71	2458.82	2443.56	2432.11

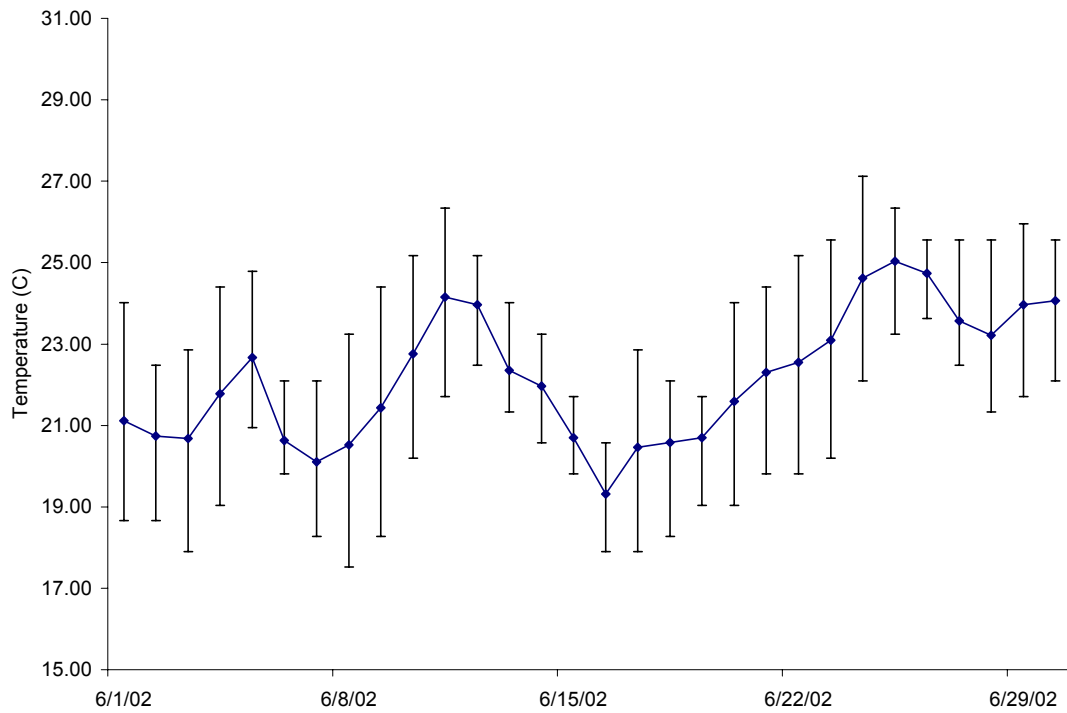


Figure A1. June 2002 daily average temperature recorded by thermograph at Cootes Store with error bars marking maximum and minimum temperatures.

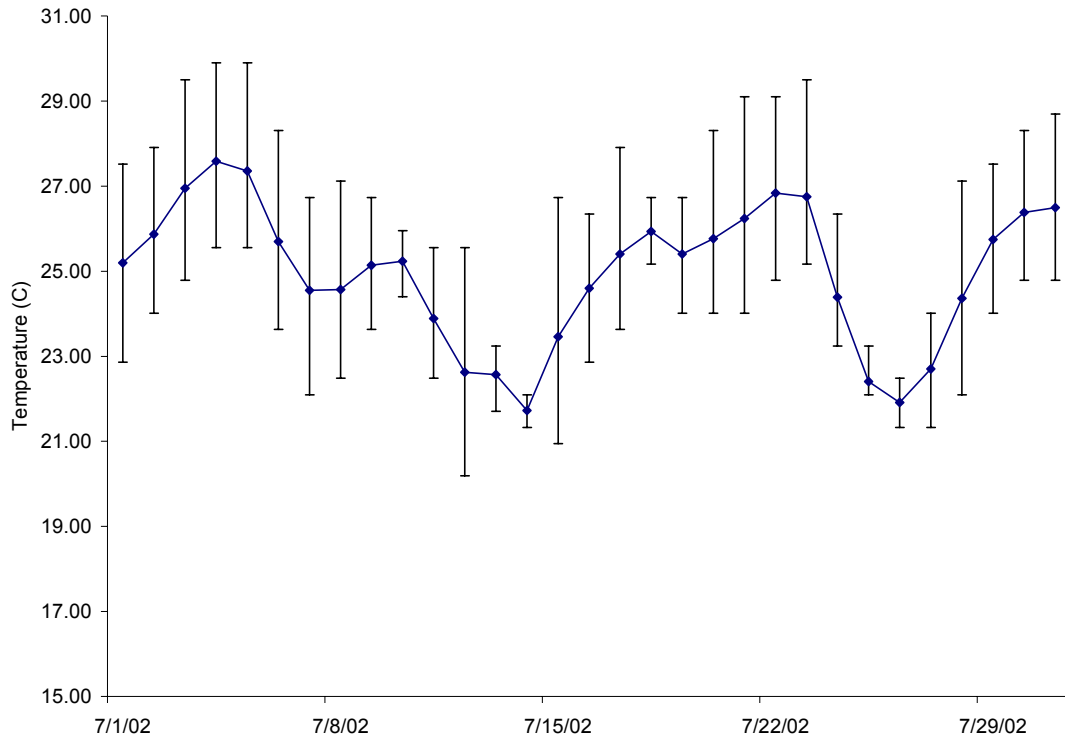


Figure A2. July 2002 daily average temperature recorded by thermograph at Cootes Store with error bars marking maximum and minimum temperatures.

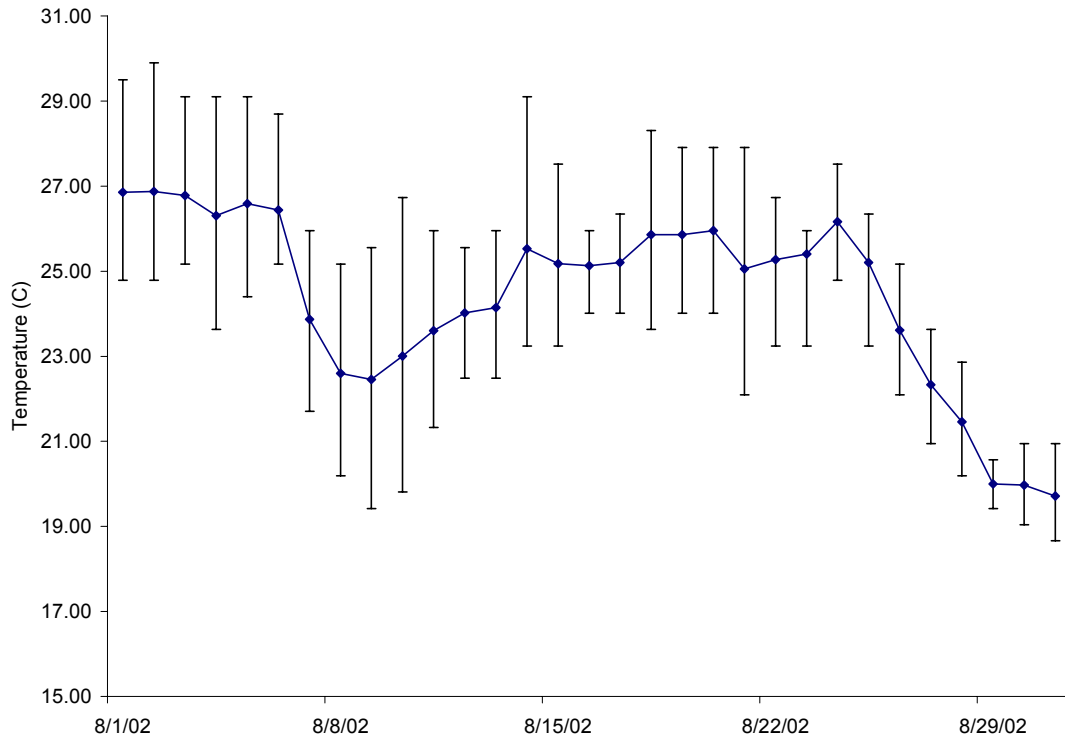


Figure A3. August 2002 daily average temperature recorded by thermograph at Cootes Store with error bars marking maximum and minimum temperatures.

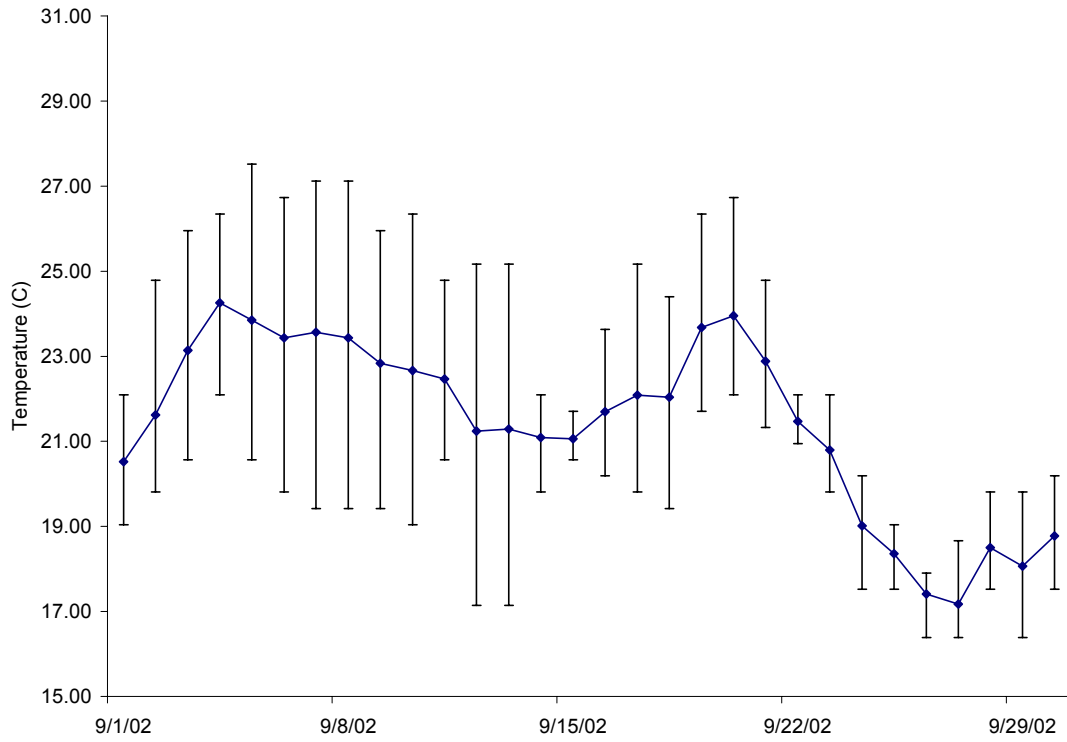


Figure A4. September 2002 daily average temperature recorded by thermograph at Cootes Store with error bars marking maximum and minimum temperatures.

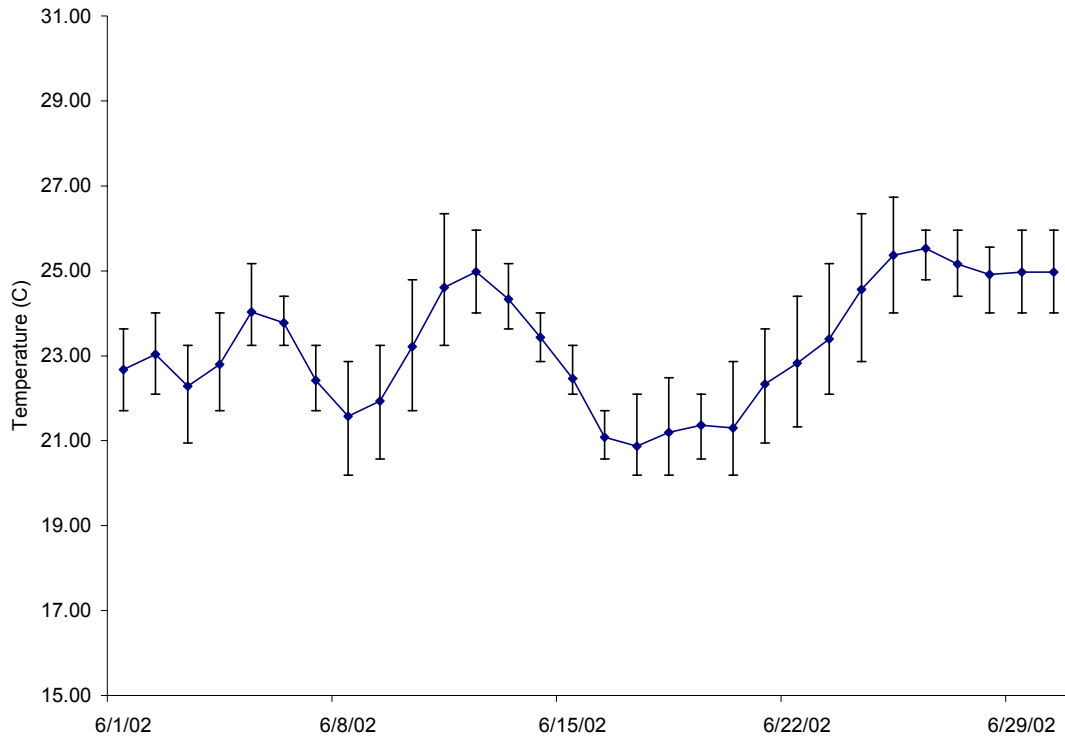


Figure A5 June 2002 daily average temperature recorded by thermograph at Mount Jackson with error bars marking maximum and minimum temperatures.

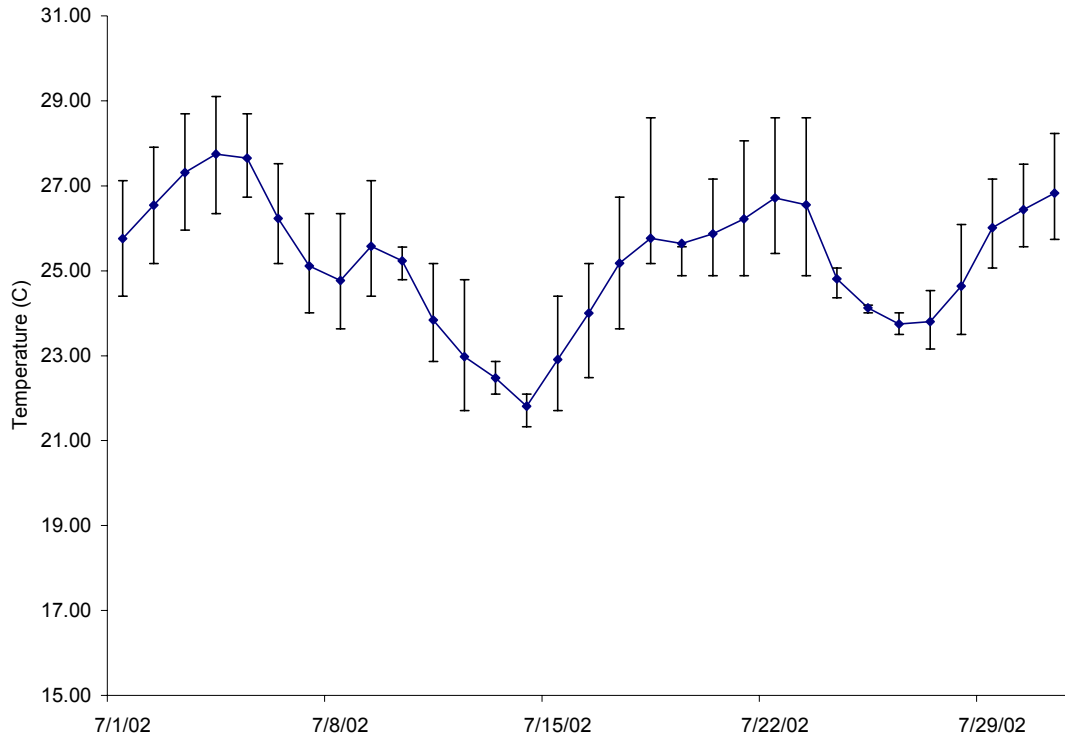


Figure A6 July 2002 daily average temperature recorded by thermograph at Mount Jackson with error bars marking maximum and minimum temperatures.

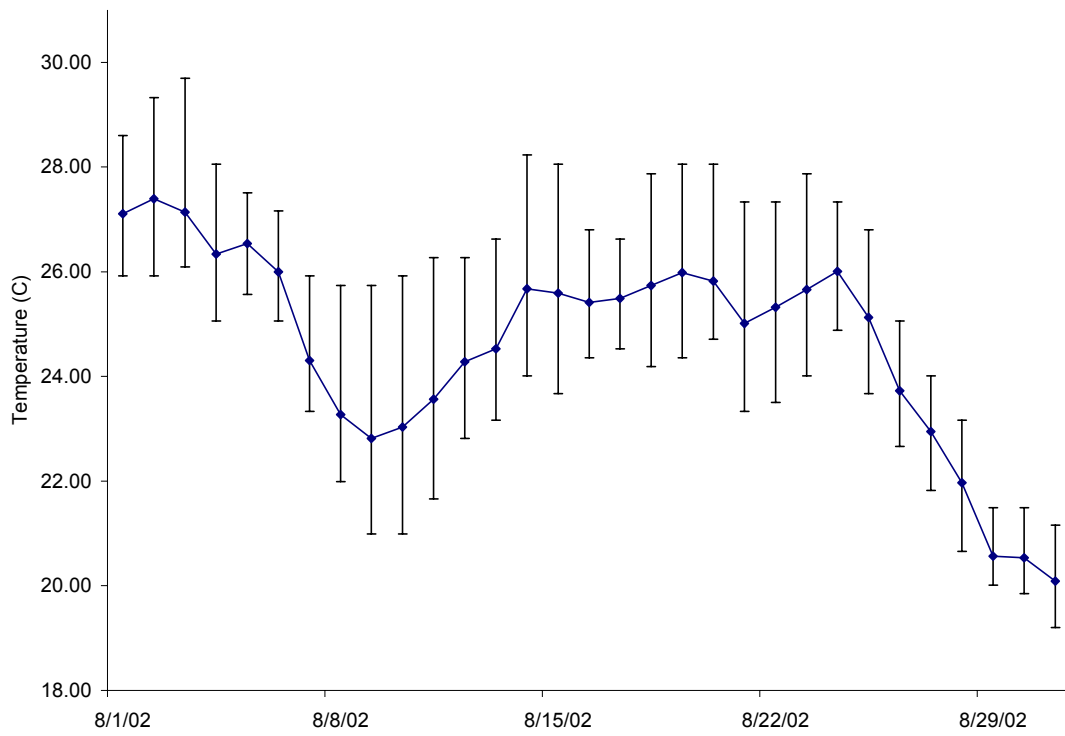


Figure A7. August 2002 daily average temperature recorded by thermograph at Mount Jackson with error bars marking maximum and minimum temperatures.

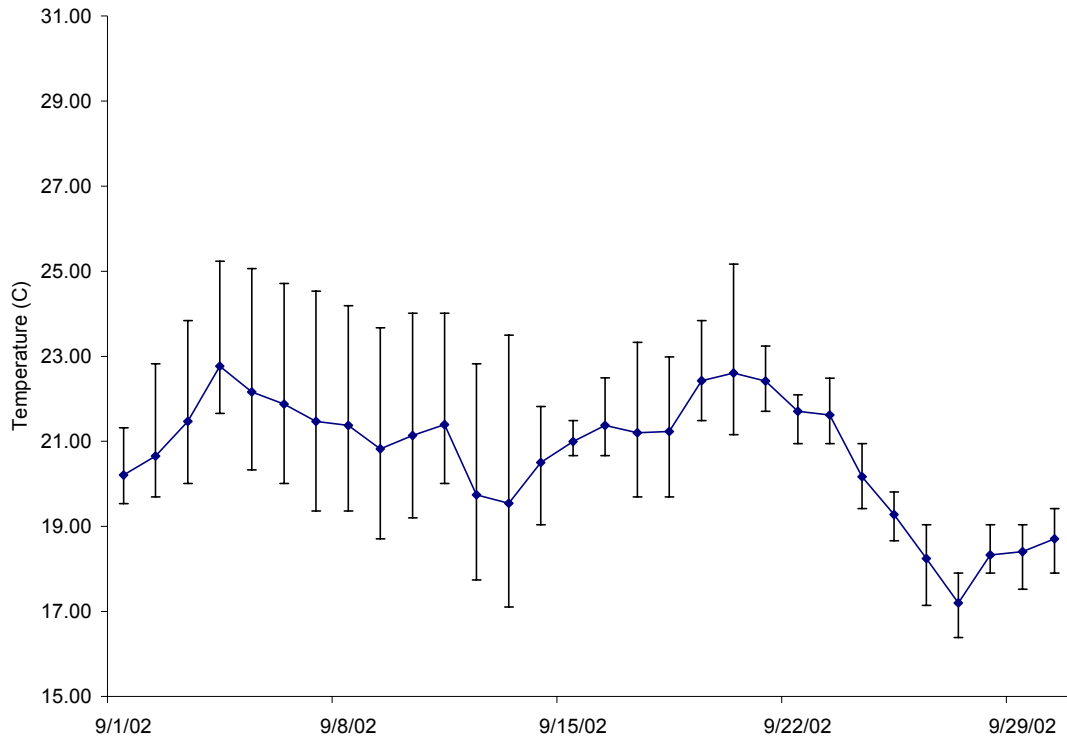


Figure A8. September 2002 daily average temperature recorded by thermograph at Mount Jackson with error bars marking maximum and minimum temperatures.

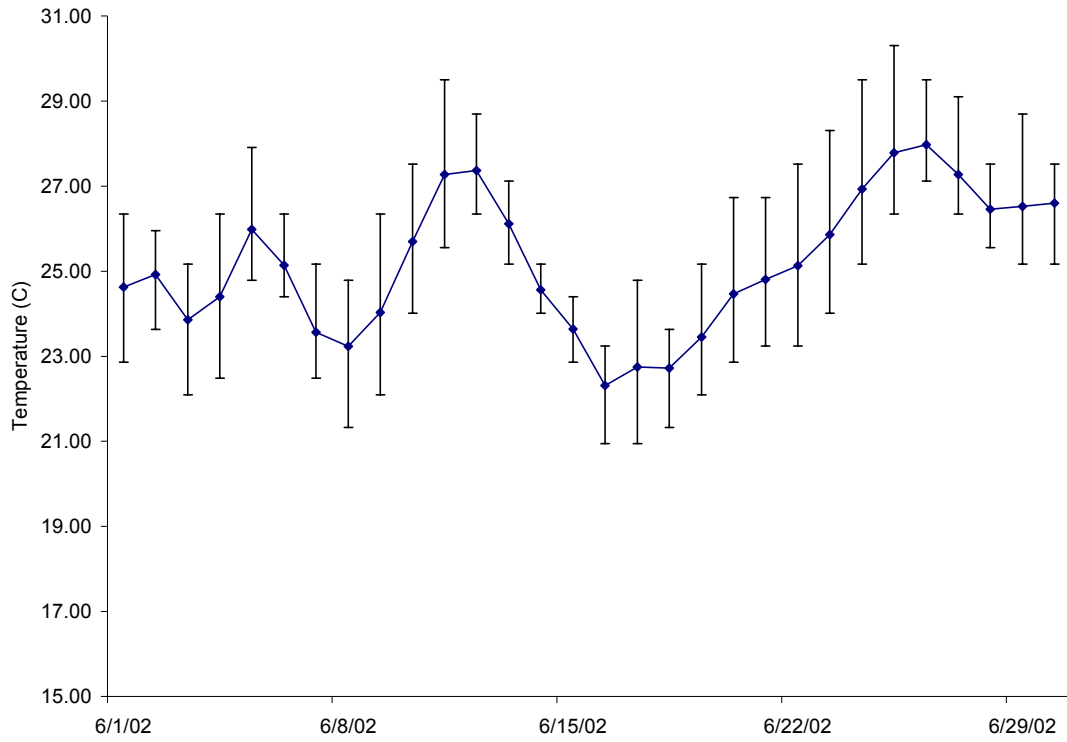


Figure A9. June 2002 daily average temperature recorded by thermograph at Strasburg with error bars marking maximum and minimum temperatures.

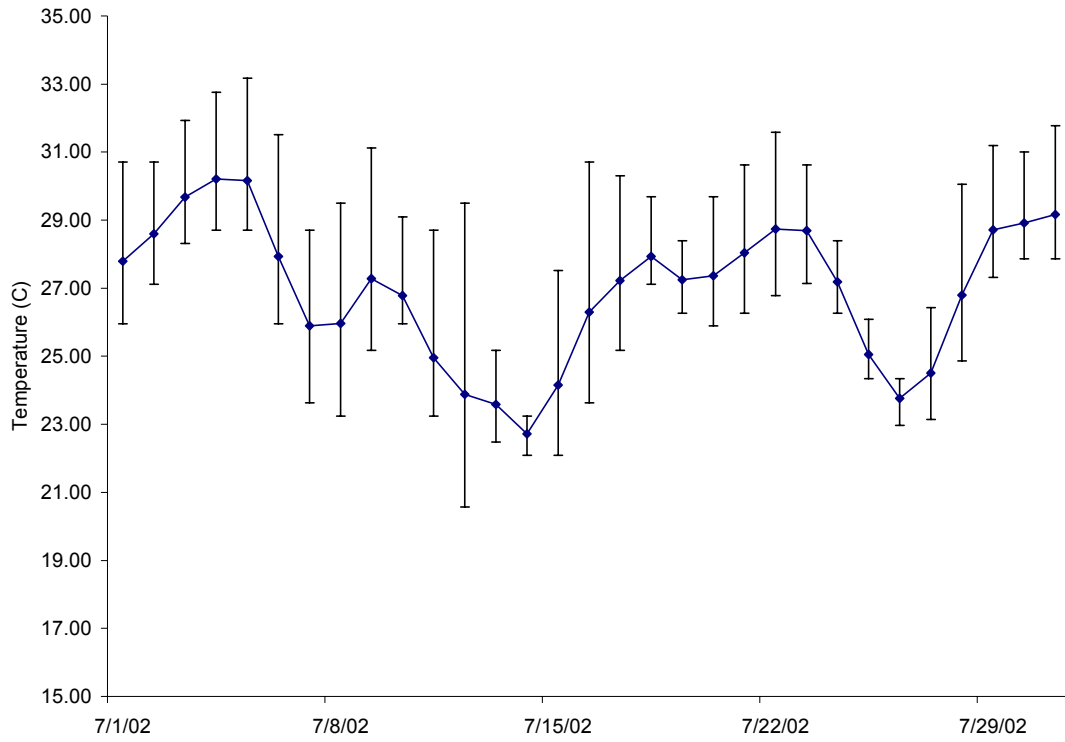


Figure A10. July 2002 daily average temperature recorded by thermograph at Strasburg with error bars marking maximum and minimum temperatures.

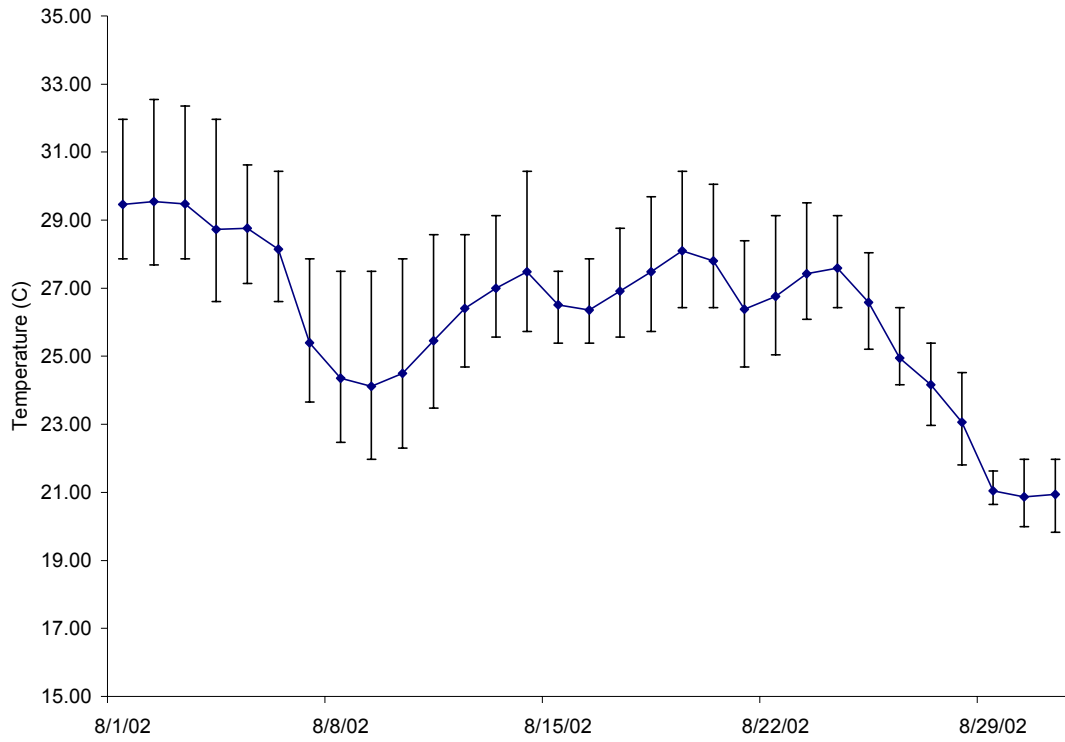


Figure A11. August 2002 daily average temperature recorded by thermograph at Strasburg with error bars marking maximum and minimum temperatures.

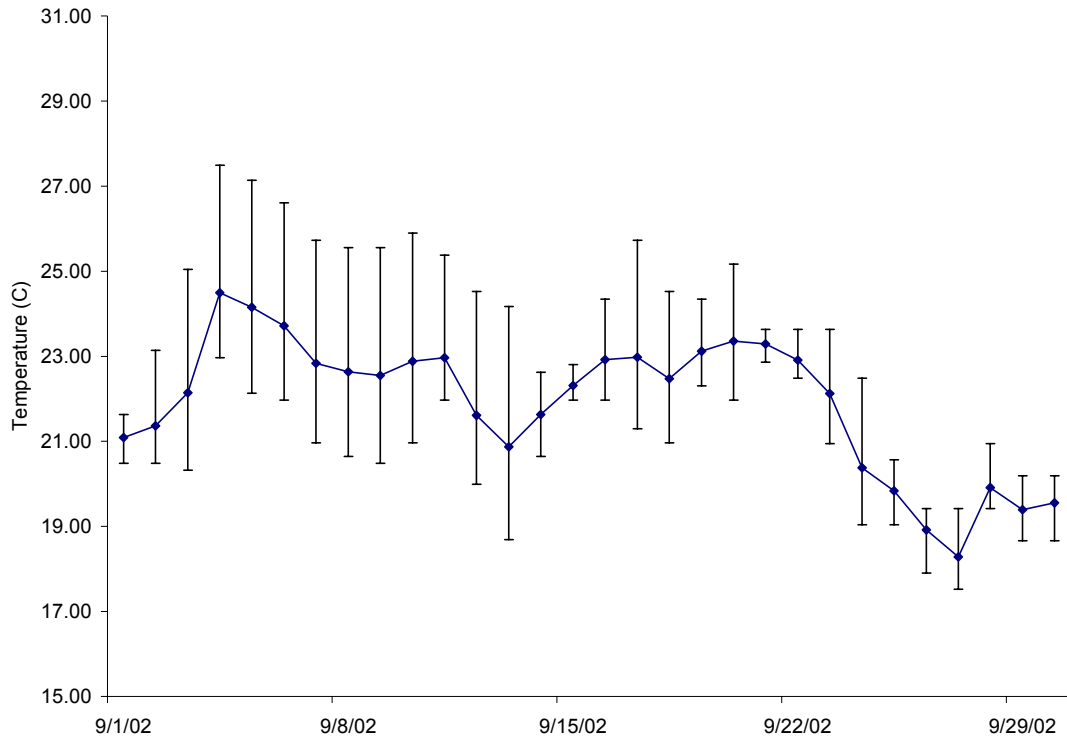


Figure A12. September 2002 daily average temperature recorded by thermograph at Strasburg with error bars marking maximum and minimum temperatures.