

APPENDIX A

Byron State Fish Hatchery, Oklahoma HACCP Plan For Bluegill

Revision Date: September 19, 2003

- 1) Species Description
- 2) Past Stocking History
- 3) Flow Diagram
- 4) Potential Hazards
- 5) Hazard Analysis Worksheet
- 6) HACCP Plan Form
- 7) HACCP Step Summary

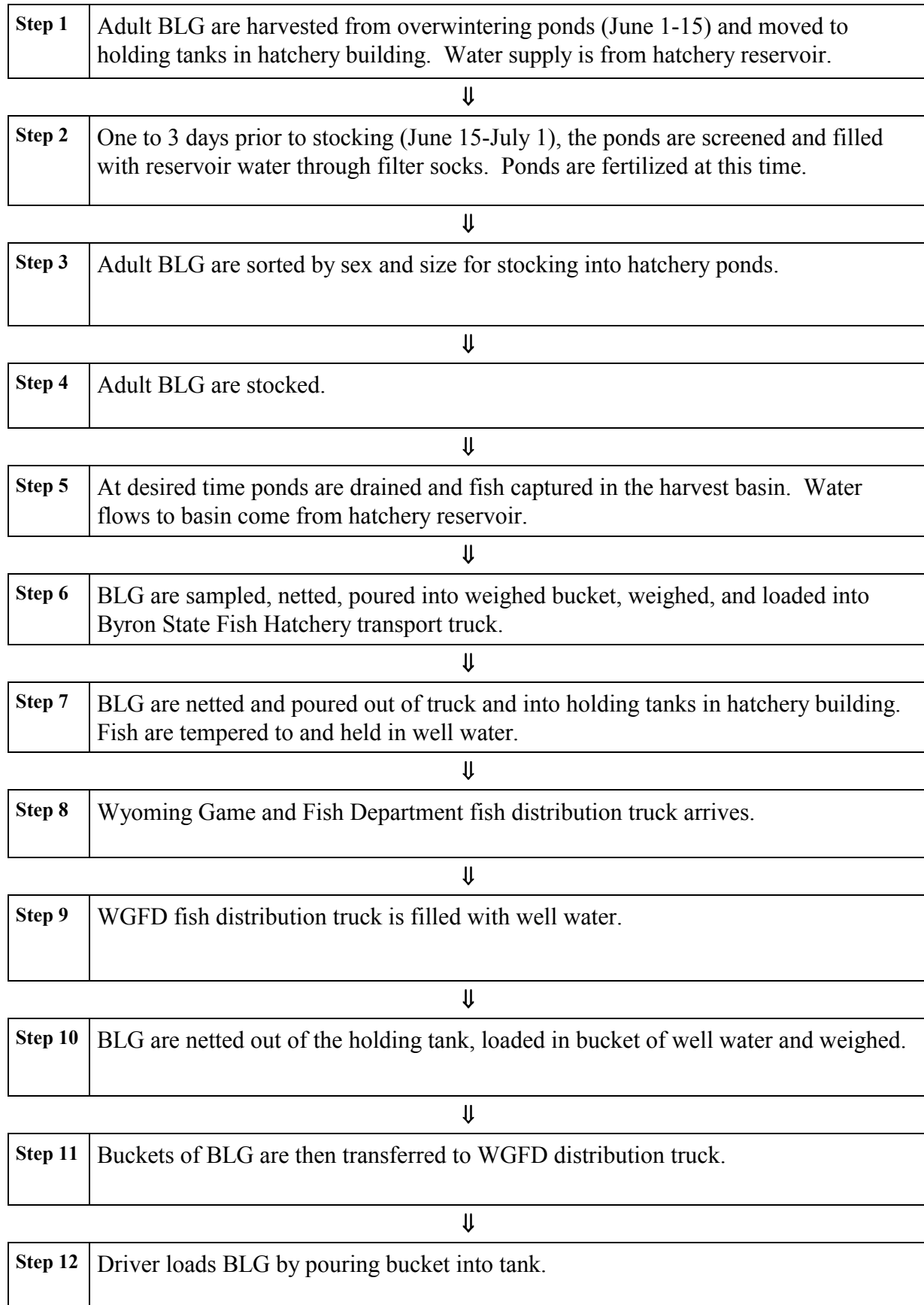
1. Species Description

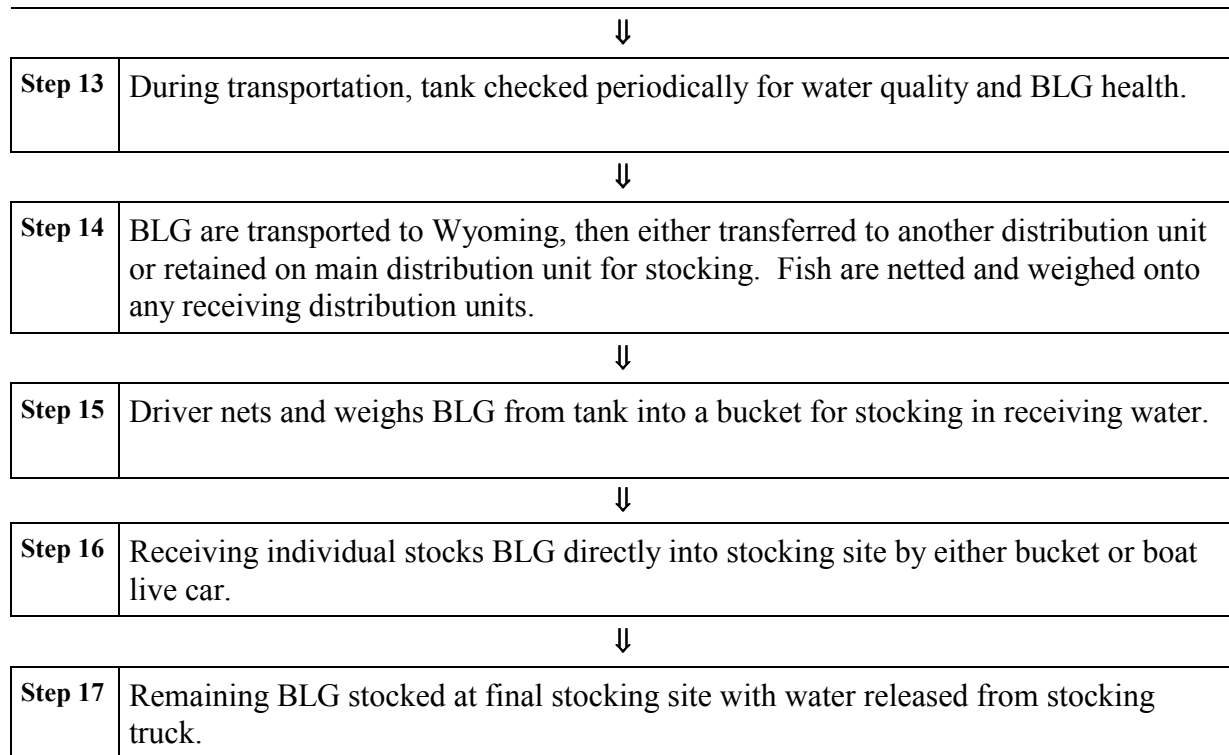
Hatchery Name:	Byron State Fish Hatchery
Hatchery Address:	Rt. 1 Box 535 Byron, OK 73722
Species of fish imported:	Bluegill Sunfish (<i>Lepomis macrochirus</i>)/ Species Code BLG
Cultured, wild harvested, or both:	Cultured
Harvest method:	Earthen ponds drained to internal harvest basin.
Method of distribution:	Wyoming Game and Fish Department fish distribution unit.
Intended use:	Importation into the state of Wyoming for public fisheries management.
Risk Level Prior to HACCP:	<u>Level 5 Low Risk</u> – NTS Present In Source, No ANS, ORVI In Source (APPENDIX D).
Risk Level After HACCP:	<u>Level 1 –3, Low Risk</u> – depended if NTS present prior to loading and type of NTS present (APPENDIX D).

2. Past Stocking History

Water Name	Species	Number Stocked	Lbs Stocked	No/Lb	Stocking Date	ANS/NTS Present
Harrington Res.	BLG	22,500	30.0	750	10/02/1997	None Identified
Midwest Res.	BLG	10,647	91	117	10/20/1999	None Identified
East Iron Cr. Res.	BLG	5,031	43	117	10/20/1999	None Identified
Bump Sullivan Res.	BLG	25,200	21	600	10/24/2001	None Identified

3. Flow Diagram





4. Potential Hazards (List relevant species)

- A. **Aquatic Nuisance Species (ANS) Plants.** None identified in immediate drainage. (CONTACT FREQUENCY – NONE).
- B. **Aquatic Nuisance Species (ANS) Fish and Other Vertebrates.** None identified in immediate drainage. (CONTACT FREQUENCY –NONE).
- C. **Aquatic Nuisance Species (ANS) Invertebrates.** None identified in immediate drainage. (CONTACT FREQUENCY – NONE)
- D. **Non-Target Species (NTS) Plants.** Filamentous algae, Chara, Coontail, Duckweed. (CONTACT FREQUENCY – VERY LOW).
- E. **Non-Target Species (NTS) Fish.** Green sunfish, channel catfish, largemouth bass may be present in the pond. Although NTS fish are rare they are generally larger and easy to remove. (CONTACT FREQUENCY – VERY LOW)
- F. **Non-Target Species (NTS) Amphibians** Plains Leopard Frog, Bullfrog, and Tiger Salamander are only adult amphibians present in and around the hatchery ponds. Tadpoles are sometimes noted during BLG harvest and usually are either Plains Leopard Frog or Bullfrog tadpoles. (CONTACT FREQUENCY – LOW).

G. Non-Target Species (NTS) Invertebrates. Snails of genus Physa or Hydra.
(CONTACT FREQUENCY – VERY LOW).

H. Specific Pathogen of Concern and/or Other Health Concerns: Byron State Fish Hatchery has been tested and determined to be Largemouth Bass Virus free. No known salmonid pathogens are present although the hatchery has not been inspected.
(CONTACT FREQUENCY – VERY LOW)

5. Hazard Analysis Worksheet

A. ANS Hazard Analysis Worksheet

(1) Harvest or Aquaculture Step (from flow diagram)	(2) Identify potential ANS hazards introduced or controlled at this step (1)	(3) Are any potential ANS hazards significant? (Yes/No)	(4) Justify your decisions for column 3.	(5) What control measures can be applied to prevent the significant hazards?	(6) Is this step a critical control point? (Yes/No)
All Steps	Fish/Other Vertebrate	No	None Present		
	Invertebrate	No	None Present		
	Plant	No	None Present		

B. NTS Hazard Analysis Worksheet

(1) Harvest or Aquaculture Step (from flow diagram)	(2) Identify potential NTS hazards introduced or controlled at this step (1)	(3) Are any potential NTS hazards significant? (Yes/No)	(4) Justify your decisions for column 3.	(5) What control measures can be applied to prevent the significant hazards?	(6) Is this step a critical control point? (Yes/No)
Step 1. Adult BLG are harvested from overwintering ponds (June 1-15) and moved to holding tanks in hatchery building. Water supply is from hatchery reservoir.	Fish/Other Vertebrate	No	None Present		
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 2. One to 3 days prior to stocking (June 15-July 1) the ponds are screened and filled with reservoir water through filter socks. Ponds are fertilized at this time.	Fish/Other Vertebrate	No	None Present		
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		

B. NTS Hazard Analysis Worksheet (Continued)

(1) Harvest or Aquaculture Step (from flow diagram)	(2) Identify potential NTS hazards introduced or controlled at this step (1)	(3) Are any potential NTS hazards significant? (Yes/No)	(4) Justify your decisions for column 3.	(5) What control measures can be applied to prevent the significant hazards?	(6) Is this step a critical control point? (Yes/No)
Step 3. Adult BLG are sorted by sex and size for stocking into hatchery ponds.	Fish/Other Vertebrate	No	None Present		
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 4. Adult BLG are stocked into ponds.	Fish/Other Vertebrate	No	None Present		
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 5. At desired time ponds are drained and fish captured in the harvest basin. Water flows to basin come from hatchery reservoir.	Fish/Other Vertebrate	No	None Present		
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 6. BLG are sampled, netted, poured into weighed bucket, weighed, and loaded into Byron State Fish Hatchery transport truck.	Fish/Other Vertebrate GSF, CCF and/or LMB	No	NTS Fish May Be Present in Basin	Visual Inspection of Sampled Fish	Yes
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 7. BLG are netted and poured out of truck into holding tanks in hatchery building. Fish are tempered to and held in well water.	Fish/Other Vertebrate GSF, CCF and/or LMB	No	NTS Fish May Be Present in Tanks	ID & Remove Any NTS Vertebrates From Tanks	No
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 8. Wyoming Game and Fish Department fish distribution truck arrives.	Fish/Other Vertebrate	No	None Present		
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 9. WGFD fish distribution truck is filled with well water.	Fish/Other Vertebrate	No	None Present		
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		

B. NTS Hazard Analysis Worksheet (Continued)

(1) Harvest or Aquaculture Step (from flow diagram)	(2) Identify potential NTS hazards introduced or controlled at this step (1)	(3) Are any potential NTS hazards significant? (Yes/No)	(4) Justify your decisions for column 3.	(5) What control measures can be applied to prevent the significant hazards?	(6) Is this step a critical control point? (Yes/No)
Step 10. BLG are netted out of the holding tank, loaded in bucket of well water and weighed.	Fish/Other Vertebrate GSF, CCF and/or LMB	No	NTS Fish May Be Present in Buckets	If Present, ID & Remove Any NTS Vertebrates From Buckets If Possible	No
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 11. The buckets of BLG are then transferred to distribution truck.	Fish/Other Vertebrate GSF, CCF and/or LMB	No	NTS Fish May Be Present in Buckets	NTS Present Controlled at Subsequent Step	No
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 12. BLG are poured from bucket into WGFD distribution tank.	Fish/Other Vertebrate GSF, CCF and/or LMB	Yes	NTS Fish May Be Present in Buckets	If NTS Present, Run Bucket Over Sort Board Before Loading	Yes
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 13. During transportation, tank checked periodically for water quality and BLG health.	Fish/Other Vertebrate GSF, CCF and/or LMB	No	NTS Fish May Be Present in Tank	If NTS Present, Try to Remove If Possible	No
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 14. BLG are transported to Wyoming, then either transferred to another distribution unit or retained on main distribution unit for stocking. Fish are netted and weighed onto any receiving distribution units.	Fish/Other Vertebrate GSF, CCF and/or LMB	No	NTS Fish May Be Present in Net	Visual Inspection Of Sampled Fish, Sort Board Fish If NTS Present	No
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		

B. NTS Hazard Analysis Worksheet (Continued)

(1) Harvest or Aquaculture Step (from flow diagram)	(2) Identify potential NTS hazards introduced or controlled at this step (1)	(3) Are any potential NTS hazards significant? (Yes/No)	(4) Justify your decisions for column 3.	(5) What control measures can be applied to prevent the significant hazards?	(6) Is this step a critical control point? (Yes/No)
Step 15. Driver nets and weighs BLG from tank into a bucket for stocking in receiving water.	Fish/Other Vertebrate GSF, CCF and/or LMB	Yes	If NTS ID'd Before Step 12, NTS May Be Present In Bucket	Visual Inspection Of Bucket, Sort If NTS Identified	Yes
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 16. Receiving individual stocks BLG directly into stocking site by either bucket or boat live car.	Fish/Other Vertebrate GSF, CCF and/or LMB	Yes	NTS Fish May Be Present In Bucket	If NTS ID'd At Steps 6 & 15, Visual Review Of Bucket Before Stocking	No
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 17. Remaining BLG stocked at final stocking site with water released from stocking truck.	Fish/Other Vertebrate GSF, CCF and/or LMB	Yes	NTS Fish May Still Be Present in Distribution Tank	If NTS ID'd At Step 14 Or 15, Empty Tank Into Net And Run Remaining BLG Over Sort Board If NTS Is Of Concern	Yes
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		

1. HACCP Step Summary

Culture of bluegill at Byron State Fish Hatchery requires multiple spawns by hand-sorted adults in a regulated pond environment. The water supplied to the pond is sock filtered from the hatchery supply reservoirs with the facility located near the head of its drainage. The drainage is isolated and free of any known ANS as well. Considering these conditions, the incidence of NTS vertebrates is very low, especially with bluegill.

Beyond the low incidence of external influences, the process to harvest and transfer fish to hatchery tanks allows better control and review of the fish lot before loading. Bluegill production at Byron State Hatchery is at a low risk level before any pond is drained and affords numerous opportunities to monitor for and remove any NTS concern, resulting in a very low risk quality bluegill product. The steps throughout this HACCP identifying vertebrate NTS are provided only as a precautionary process on the rare occasion NTS may be encountered.

APPENDIX B

Byron State Fish Hatchery, Oklahoma HACCP Plan For Bluegill-Green Sunfish Hybrid

Revision Date: September 19, 2003

- 8) Species Description
- 9) Past Stocking History
- 10) Flow Diagram
- 11) Potential Hazards
- 12) Hazard Analysis Worksheet
- 13) HACCP Plan Form
- 14) HACCP Step Summary

1. Species Description

Hatchery Name:	Byron State Fish Hatchery
Hatchery Address:	Rt. 1 Box 535 Byron, OK 73722
Species of fish imported:	Bluegill X Green Sunfish Hybrid/ Species Code GBH
Cultured, wild harvested, or both:	Cultured
Harvest method:	Earthen ponds drained to internal harvest basin.
Method of distribution:	Wyoming Game and Fish Department fish distribution unit.
Intended use:	Importation into the state of Wyoming for public fisheries management.
Risk Level Prior to HACCP:	<u>Level 5 Low Risk</u> – NTS Present In Source, No ANS, ORVI In Source (APPENDIX D).
Risk Level After HACCP:	<u>Level 1 –3, Low Risk</u> – depended if NTS present prior to loading and type of NTS present (APPENDIX D).

2. Past Stocking History

Water Name	Species	Number Stocked	Lbs Stocked	No/Lb	Stocking Date	ANS/NTS Present
Burlington Res.	GBH	9,750	6.50	1500	10/02/1997	None Identified
Horseshoe Res.	GBH	11,250	7.50	1500	10/02/1997	None Identified
Renner Res. 2	GBH	6,750	4.50	1500	10/02/1997	None Identified
South Worland Pd	GBH	2,250	1.50	1500	10/02/1997	None Identified
Burlington Res.	GBH	10,000	20.00	500	10/28/1998	None Identified
South Worland Pond	GBH	3,500	7.00	500	10/28/1998	None Identified

Renner Reservoir	GBH	20,000	41.00	500	10/28/1998	None Identified
------------------	-----	--------	-------	-----	------------	-----------------

2. Past Stocking History (Continued)

Water Name	Species	Number Stocked	Lbs Stocked	No/Lbs	Stocking Date	ANS/NTS Present
Renner Reservoir	GBH	25,800	32.25	800	10/26/2000	None Identified
Croft Pond	GBH	200	0.25	800	10/26/2000	None Identified
Bump Sullivan Res.	GBH	6,000	10.00	600	10/24/2001	None Identified
Renner Reservoir	GBH	7,500	100.00	75	10/24/2001	None Identified

3. Flow Diagram

Step 1	Adult BLG and GSF are harvested from overwintering ponds (June 1-15) and moved to holding tanks in hatchery building. Water supply is from hatchery reservoir.
---------------	--



Step 2	One to 3 days prior to stocking (June 15-July 1) the ponds are screened and filled with reservoir water through filter socks. Ponds are fertilized at this time.
---------------	--



Step 3	Adult BLG and GSF are sorted by sex and size for stocking into hatchery ponds.
---------------	--



Step 4	Adult BLG males and GSF females are stocked.
---------------	--



Step 5	At desired time ponds are drained and fish captured in the harvest basin. Water flows to basin come from hatchery reservoir.
---------------	--



Step 6	GBH are sampled, netted, poured into weighed bucket, weighed, and loaded into Byron State Fish Hatchery transport truck.
---------------	--

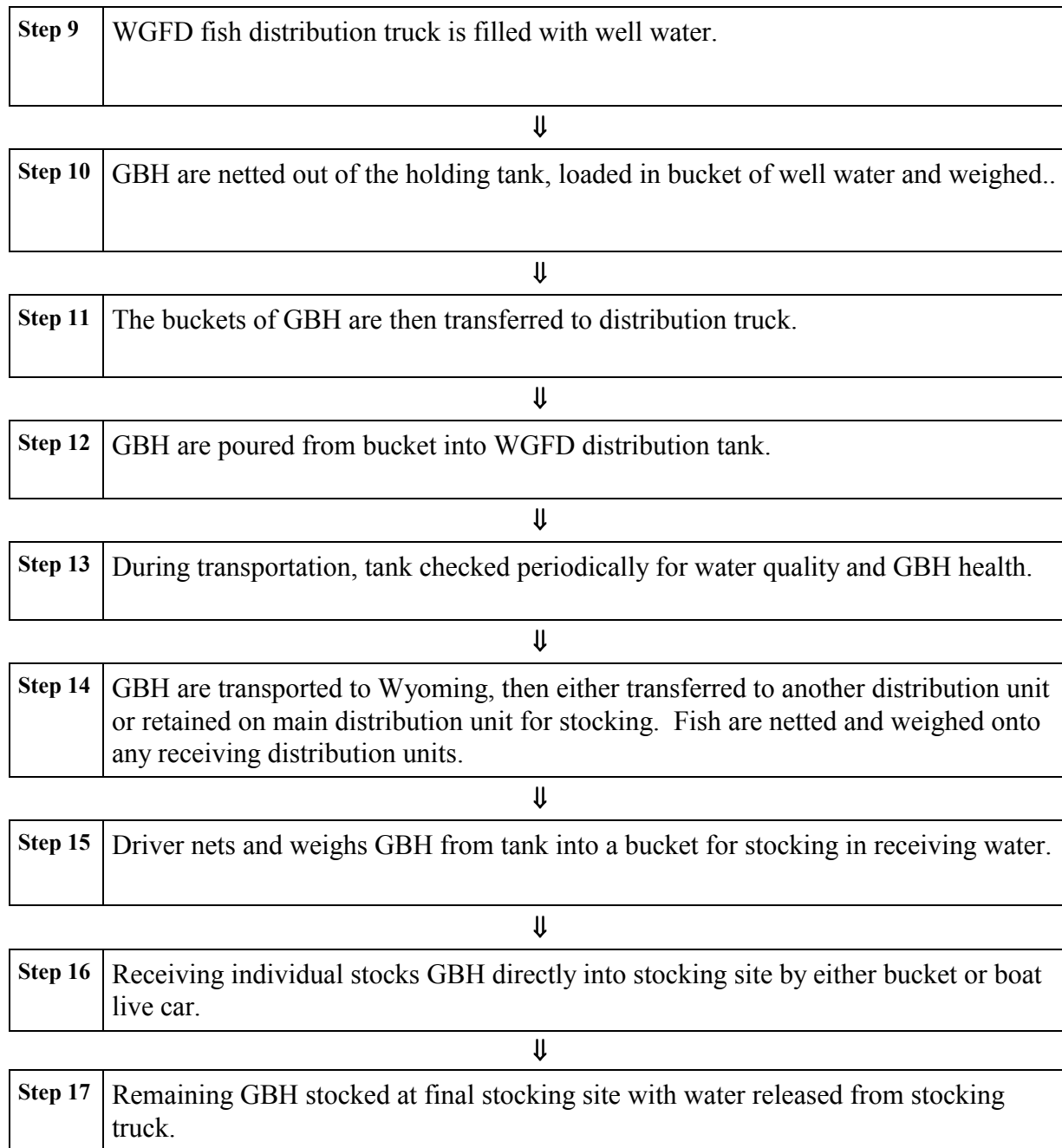


Step 7	GBH are netted and poured out of truck and into holding tanks in hatchery building. Fish are tempered to and held in well water.
---------------	--



Step 8	Wyoming Game and Fish Department fish distribution truck arrives.
---------------	---





4. Potential Hazards (List relevant species)

A. Aquatic Nuisance Species (ANS) Plants. None identified in immediate drainage. (CONTACT FREQUENCY – NONE).

B. Aquatic Nuisance Species (ANS) Fish and Other Vertebrates. None identified in immediate drainage. (CONTACT FREQUENCY –NONE).

C. Aquatic Nuisance Species (ANS) Invertebrates. None identified in immediate drainage. (CONTACT FREQUENCY – NONE).

D. Non-Target Species (NTS) Plants. Filamentous algae, Chara, Coontail, Duckweed. (CONTACT FREQUENCY – VERY LOW).

E. Non-Target Species (NTS) Fish. Green sunfish, channel catfish, largemouth bass may be present in the pond. Although NTS fish are rare they are generally larger and easy to remove. (CONTACT FREQUENCY – VERY LOW)

F. Non-Target Species (NTS) Amphibians Plains Leopard Frog, Bullfrog, and Tiger Salamander are only adult amphibians present in and around the hatchery ponds. Tadpoles are sometimes noted during GBH harvest and usually are either Plains Leopard Frog or Bullfrog tadpoles. (CONTACT FREQUENCY – LOW).

G. Non-Target Species (NTS) Invertebrates. Snails of genus Physa or Hydra. (CONTACT FREQUENCY – VERY LOW).

H. Specific Pathogen of Concern and/or Other Health Concerns: Byron State Fish Hatchery has been tested and determined to be Largemouth Bass Virus free. No known salmonid pathogens are present although the hatchery has not been inspected. (CONTACT FREQUENCY – VERY LOW)

5. Hazard Analysis Worksheet

A. ANS Hazard Analysis Worksheet

(1) Harvest or Aquaculture Step (from flow diagram)	(2) Identify potential ANS hazards introduced or controlled at this step (1)	(3) Are any potential ANS hazards significant? (Yes/No)	(4) Justify your decisions for column 3.	(5) What control measures can be applied to prevent the significant hazards?	(6) Is this step a critical control point? (Yes/No)
All Steps	Fish/Other Vertebrate	No	None Present		
	Invertebrate	No	None Present		
	Plant	No	None Present		

B. NTS Hazard Analysis Worksheet

(1) Harvest or Aquaculture Step (from flow diagram)	(2) Identify potential NTS hazards introduced or controlled at this step (1)	(3) Are any potential NTS hazards significant? (Yes/No)	(4) Justify your decisions for column 3.	(5) What control measures can be applied to prevent the significant hazards?	(6) Is this step a critical control point? (Yes/No)
Step 1. Adult BLG and GSF are harvested from overwintering ponds (June 1-15) and moved to holding tanks in hatchery building. Water supply is from hatchery reservoir.	Fish/Other Vertebrate	No	None Present		
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 2. One to 3 days prior to stocking (June 15- July 1) the ponds are screened and filled with reservoir water through filter socks. Ponds are fertilized at this time.	Fish/Other Vertebrate	No	None Present		
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 3. Adult BLG and GSF are sorted by sex and size for stocking into hatchery ponds.	Fish/Other Vertebrate	No	None Present		
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 4. Adult BLG males and GSF females are stocked into ponds.	Fish/Other Vertebrate <u>Salmonids</u>	No	None Present		
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 5. At desired time ponds are drained and fish captured in the harvest basin. Water flows to basin come from hatchery reservoir.	Fish/Other Vertebrate	No	None Present		
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 6. GBH are sampled, netted, poured into weighed bucket, weighed, and loaded into Byron State Fish Hatchery transport truck.	Fish/Other Vertebrate GSF, CCF and/or LMB	No	NTS Fish May Be Present in Basin	Visual Inspection of Sampled Fish	Yes
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		

B. NTS Hazard Analysis Worksheet (Continued)

(1) Harvest or Aquaculture Step (from flow diagram)	(2) Identify potential NTS hazards introduced or controlled at this step (1)	(3) Are any potential NTS hazards significant? (Yes/No)	(4) Justify your decisions for column 3.	(5) What control measures can be applied to prevent the significant hazards?	(6) Is this step a critical control point? (Yes/No)
Step 7. GBH are netted and poured out of truck into holding tanks in hatchery building. Fish are tempered to and held in well water.	Fish/Other Vertebrate GSF, CCF and/or LMB	No	NTS Fish May Be Present in Tanks	ID & Remove Any NTS Vertebrates From Tanks	No
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 8. Wyoming Game and Fish Department fish distribution truck arrives.	Fish/Other Vertebrate	No	None Present		
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 9. WGFD fish distribution truck is filled with well water.	Fish/Other Vertebrate	No	None Present		
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 10. GBH are netted out of the holding tank, loaded in bucket of well water and weighed.	Fish/Other Vertebrate GSF, CCF and/or LMB	No	NTS Fish May Be Present in Buckets	If Present, ID & Remove Any NTS Vertebrates From Buckets If Possible	No
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 11. Buckets of GBH are then transferred to distribution truck.	Fish/Other Vertebrate GSF, CCF and/or LMB	No	NTS Fish May Be Present in Buckets	If Present, ID & Remove Any NTS Vertebrates From Buckets If Possible	No
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		

B. NTS Hazard Analysis Worksheet (Continued)

(1) Harvest or Aquaculture Step (from flow diagram)	(2) Identify potential NTS hazards introduced or controlled at this step (1)	(3) Are any potential NTS hazards significant? (Yes/No)	(4) Justify your decisions for column 3.	(5) What control measures can be applied to prevent the significant hazards?	(6) Is this step a critical control point? (Yes/No)
Step 12. GBH are poured from bucket into WGFD distribution tank.	Fish/Other Vertebrate GSF, CCF and/or LMB	Yes	NTS Fish May Be Present in Buckets	If NTS Present, Run Bucket Over Sort Board Before Loading	Yes
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 13. During transportation, tank checked periodically for water quality and GBH health.	Fish/Other Vertebrate GSF, CCF and/or LMB	No	NTS Fish May Be Present in Tank	If NTS Present, Try to Remove If Possible	No
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 14. GBH are transported to Wyoming, then either transferred to another distribution unit or retained on main distribution unit for stocking. Fish are netted and weighed onto any receiving distribution units.	Fish/Other Vertebrate GSF, CCF and/or LMB	No	NTS Fish May Be Present in Net	Visual Inspection Of Sampled Fish, Sort Board Fish If NTS Present	No
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 15. Driver nets and weighs GBH from tank into a bucket for stocking in receiving water.	Fish/Other Vertebrate GSF, CCF and/or LMB	Yes	If NTS ID'd Before Step 12, NTS May Be Present In Bucket	Visual Inspection Of Bucket, Sort If NTS Identified	Yes
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		
Step 16. Receiving individual stocks GBH directly into stocking site by either bucket or boat live car.	Fish/Other Vertebrate GSF, CCF and/or LMB	Yes	NTS Fish May Be Present In Bucket	If NTS ID'd At Steps 6 & 15, Visual Review Of Bucket Before Stocking	No
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		

B. NTS Hazard Analysis Worksheet (Continued)

(1) Harvest or Aquaculture Step (from flow diagram)	(2) Identify potential NTS hazards introduced or controlled at this step (1)	(3) Are any potential NTS hazards significant? (Yes/No)	(4) Justify your decisions for column 3.	(5) What control measures can be applied to prevent the significant hazards?	(6) Is this step a critical control point? (Yes/No)
Step 17. Remaining BLG stocked at final stocking site with water released from stocking truck.	Fish/Other Vertebrate GSF, CCF and/or LMB	Yes	NTS Fish May Still Be Present in Distribution Tank	If NTS ID'd At Step 14 Or 15, Empty Tank Into Net And Run Remaining GBH Over Sort Board If NTS Is Of Concern	Yes
	Invertebrate	No	None Present		
	Plant	No	None Present		
	Parasites and Pathogens	No	None Present		

6. ANS-HACCP Plan Form – Preventative Measures

(1) Critical Control Point: Step 6. GBH are sampled, netted, poured into weighed bucket, weighed, and loaded into Byron State Fish Hatchery transport truck.	
(2) Significant Hazard(s): First opportunity to examine GBH for NTS vertebrates. If no NTS present, risk level reduced significantly.	
(3) Limits for Each Control Measure: Identify any NTS vertebrate present. WGFD representatives informed of NTS prior to their arrival for loading.	
Monitoring	(4) What: If NTS identified, requires focused HACCP due to increased risk level. Identified NTS may be acceptable for destination and considered lower risk level after review of WGFD NTS Acceptance List (APPENDIX C, "Stocking Guide for Non-Target Species Management").
	(5) How: If NTS is identified in GBH and a concern, additional examination of fish loaded to the hatchery is required to determine extent of NTS presence. Sorting and removal may be required in subsequent steps if NTS not acceptable for destination; or confirm pond not accepted for importation.
	(6) Frequency: Depended on NTS concern. NTS species may be acceptable for destination, if so, subsequent monitoring required reaffirming identified species only NTS present. If NTS species not acceptable, load not imported to Wyoming if subsequent steps cannot effectively remove NTS by net and sorting board.
	(7) Who: Byron State Fish Hatchery personnel upon sampling, assisted by WGFD personnel if NTS removal is warranted.
(8) Corrective Actions: Upon identifying NTS, Byron Hatchery personnel contact WGFD representative for NTS acceptance verification. WGFD representative contacts Assistant Fish Culture Supervisor (307-473-3416) for NTS verification and final decision. Apply removal procedures if feasible or lot not accepted.	

