

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

Title: Animal Care Plan {*Poecilia mexicana* (Atlantic molly), Kelly, Carver Farms }

I. Procedure:

Daily (365 days a year without exception):

- Observe each animal and check for health concerns (*Guide* pg. 112).
- Clean and organize room, anterooms, and surrounding premises (*Guide* pg. 72).
- Record daily completion of tasks, environmental monitoring, initial, and date daily animal care sheet (*submit copy of sheet*).
- Report on the OCV Health Database M-F.
 - Any abnormal animals must be reported to the Office of the Campus Veterinarian (Health database), or if an emergency call 5-6246 or 509-335-1871.
- *Fish are fed dried bloodworms and TetraMin® flakes which are stored room temperature. They are also fed gel food which is located in the freezer. See chart for schedule:*

Day	AM	PM
M,W,F	Bloodworms	Flakes
Tu,Th	Gel Food	Flakes
Weekend/holidays	Flakes	None. Feed once only

- *Pest monitoring and/or control devices (define type) and documented on daily care sheet.*
- *Water temperature is monitored daily and recorded on the daily care sheet. Normal range is 26-27° C (78.8-80.6).*
- *Water clarity and level is monitored daily.*
- *Remove all dead fish*
 - *Soak any nets used for dead fish in iodine solution and rinse in tap water.*

Weekly:

- *Check the generator and note in the comment section of the daily care sheet*

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Monthly:

- *Water Quality Testing documented on daily care sheet:*

Water Quality	Target Range
NH3	<0.5 ppm
NO2	<80 ppm
NO3	<1 ppm
Hardness	125-175 ppm
Chlorine	0
Alkalinity	120-180 ppm
pH	7-8.5

- *Stocking density will be assessed and documented*
 - *Are there young fish present? IF no juvenile or very few present, up to 5% of the fish will be euthanized.*
 - *Body condition score (BCS): what is the average BCS of the adult fish? If 3/5 or greater no action needed, if average is low then up to 5% of fish will be euthanized.*
 -

Facilities

- *Fish are housed at Carver Farms indoor aquatic center with central heating system, swamp coolers and a generator present for back up in the event of power failure.*
- *No ventilation or air exchange is measure in this building*
- *The illumination is manually controlled and remains off unless someone is in the room.*
- *Interior room surfaces shall be moisture-resistant, non-absorbent, impact resistant, and sanitizable.*

Housing

- *The fish are housed in a plastic 135 gallon trough.*
- *The fish are provided with natural cover , plastic fine mesh.*
- *Fish are housed socially for environmental enrichment and reproduction.*

II. Sanitation Monitoring

- *This housing system is in chronic use, the fish are never taken out, thus sanitation monitoring is exempt for this system.*

III. Waste Disposal

- *All carcasses are disposed via STI*
- *Water is recirculated so no water is disposed of unless there is excess which will be disposed in local sewage treatment.*
- *No hazardous waste is generated on this ASAF*

IV. Animal Numbers and Tracking

- *Paul Wheeler reports to AWP (Kerri Kuykendall)*

V. Signage, Emergency Information (List of posted signs and locations)

- *These are posted on the door leading into Rm 103*
 - *Guidelines for Reporting Animal Concerns*
 - *Emergency contact information for Satellite Housing Location Personnel*

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- Emergency contact for Veterinary assistance (OCV or other veterinarian)
- Any biological, chemical, radiation or other hazard signage as required
- Notification Protocol for Abnormal Animals

VI. Security

-

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VII. Disaster Plan

- *See separate plan template below. Templates are available for all WSU locations*

References

*Shortfin Molly (Poecilia mexicana); Ecological Risk Screening Summary; U.S. Fish and Wildlife Service, February 2011; Revised, August 2014, December 2017
Web Version, 8/29/2018*

Jourdan et al. (2014), Microhabitat use, population densities, and size distributions of sulfur cave-dwelling *Poecilia mexicana*. **PeerJ 2:e490; DOI 10.7717/peerj.490**

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Washington State University-Pullman
Disaster Plan
Animal Care
{Kelly} Lab- {Carver Farms Rm 103}

The primary goal for this document is to give general procedures and information for research animal care and support that are to be followed in the case of an emergency. This is secondary to the employee disaster plan and will only be implemented when conditions provide a safe working environment for employees.

Emergency Plan

WSU telephone service has temporary emergency back-up power and would work in situations of power failure. Employees would be notified of problems and work plan by {Paul Wheeler}. {Paul Wheeler} would also be responsible for notifying Facility Operations, EH & S, and OCV of emergency situations in a timely period. Employees would report to work, as they are physically able to. In cases of extended power failure and/or loss of HVAC, animals would be triaged and cared for in priority. Water supply will continue functioning unless physically damaged. There are back up supplies of food and bedding for the animals. {INSERT NAME} will supervise care for the animals during a disasters situation with advisory aid from OCV. In the absence of {INSERT NAME, INSERT NAME} would take charge of such care.

Phone List

Name	Title	Contact number
Joanna Kelly	PI	14
Paul Wheeler	Animal Care Lead	14
Facility Operations		509-335-9000
EH & S		509-335-3041
Office of the Campus Veterinarian		509-330-1871 emergency cell 509-335-6246 office
Campus Security		911 (emergency) 509-335-8548(non- emergency)
Campus Fire Department		911 (emergency)

Evacuation Plan:

In case of an emergency, such as a fire, everyone is required to leave the building immediately.
Calmly exit the building and meet at {INSERT LOCATION }.

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Title: Animal Care Plan {Salmonids, McIntyre, Puyallup }

I. Procedure:

Daily (365 days a year without exception):

- Observe each animal and check for health concerns (*Guide* pg. 112).
- Clean and organize room, anterooms, and surrounding premises (*Guide* pg.72).
- Record daily completion of tasks, environmental monitoring, initial, and date daily animal care sheet.
- Report on the OCV Health Database M-F.
 - Any abnormal animals must be reported to the Office of the Campus Veterinarian (Health database), or if an emergency call 5-6246 or 509-335-1871.
- Food type and storage
 - **Type of Food:** BioVita fry sized as appropriate (#1 and #2 crumbles, 1.2mm, 1.5mm, 2.0mm 2.5mm, 3.0mm pellet).
 - **Where Stored:** In upright freezer in Building 1046 (Fish Lab) Room 107. Excess feed is stored in a food-safe walk-in freezer in the Almendinger Breezeway.
- *Pest monitoring and/or control devices (define type) and documented on daily care sheet.*
 - **Type of Trap:** Sticky Insect Traps
 - **Are they checked on daily care sheet:** Yes
- *For aquatic species, water quality (WQ) assessments must be outline (table preferred).*
 - WQ is tracked daily, with WQ parameters in the logbooks as reference as well as trouble shooting guides for when WQ is out of parameters.
 -

Parameter	Recommended Range
Temperature	12-15 °C
Ammonia NH3	<0.5 ppm
Nitrate (NO ₃)	<80 ppm
Nitrite (NO ₂)	<1ppm
Chlorine	0
Hardness	150-200 ppm (mg/L)
Alkalinity	120-180 ppm
pH	7.0-8.5

Daily:

- WQ parameters are recorded
- Fill out Daily Care Sheet
- Flush Tanks (Is this recorded on WQ form?)
- Check all equipment (chillers, bioreactors, UV, air pumps, etc)
- Check System Water (Dosing system tanks, WQ, etc)
- Clean sump
- Spray off floor

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- Clean pump (if needed)
- Clean bead filter (If needed)
- Clean belt feeders (whenever being fed)
- Report any dead animals

Weekly (or as needed):

- Clean Center Standpipes
- Flush and bleach trench drains
- Check screws on belt feeders
- Take out garbage
- Bleach nets, brushes, standpipes, water feed pipes (the ones downstream of the water feed valves), buckets

As needed:

- Change UV Reactor Lamp (Salmon System and System Water System)
- Change Muni-Preilters
- Flush Bioreactors

Facilities

- *Describe where the animals will be housed (room, building, outdoor facilities).*
 - Building 1046 Room 108
- *Provide date and findings of the ventilation assessment (air changes/hour and flow pattern) for interior facilities (Call the Animal Welfare Program for this information 57951)*
 - Not Applicable
- *Describe illumination and mechanism of controlling light cycle. When was the last measurement taken? (AWP)*
 - Room is an a mechanical light timer, 12 on, 12 off (8am to 8pm), fluorescent lamps
- Interior room surfaces shall be moisture-resistant, non-absorbent, impact resistant, and sanitizable.

Housing

- *Describe animal housing (cage, pen, tank, etc.) size and material*

Tank	depth	Dimensions (in)	Cubic Feet	Gallon	Liter
Small Round	Deep	29 x 18	7	52.4	198
Small Round	Shallow	29 x 15.5	6	44.3	168
Large Round	Deep	72 x 16	37.7	282	1067.5
Large Round	Shallow	72 x 11.5	27	202.7	767
Semi Square	Deep	42 x 42 x 17	17	130	491
Semi Square	Shallow	42 x 42 x 12	12.25	92	347

Small Round and Large Round are gel-coated fiberglass, Semi-Square are HDPE

- *Describe environment enrichment that will be provided*
 - An area of Shade
 - A robust in-tank aerator
 - Flowing Water

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- Automatic belt feeders that drop feed from above (fish have been seen jumping to intercept feed)
- Socially housed—density based on animal counts, species, behavior, and size (total and individual mass)
- *Describe if the animals will be housed socially or individually*
 - All salmonids are housed socially

II. Sanitation Monitoring

- *Describe Sanitation Monitoring Program per SOP #5, if applicable. (Contact OCV at 509-335-6246 or ocv.alert@wsu.edu to enroll in sanitation monitoring)*
 - Tanks are monitored when empty of fish, after that tank has been cleaned and sanitized.

III. Waste Disposal

- *Describe where carcasses will be disposed*
 - Small quantities are frozen and stored in a lab freezer (Room 106) until disposal by WM (Waste Management)
 - Large quantities are stored frozen in the lab walk-in freezer (Almendinger Breezeway, Freezer #3) until disposal by WM
- *Describe where water will be disposed and how?*
 - Water is disposed of in municipal treatment
- *Describe how hazardous waste is disposed if applicable*
 - Water used for culling (that contains MS222) is disposed of using EH&S Protocols (dilution to less than .1%, exposure to UV light)

IV. Animal Numbers and Tracking

- *List the person's name that will be tracking animals on My Research*
 - Jill Wetzel will report numbers monthly to the IACUC Office
 - Grad students are responsible for reporting their own numbers to IACUC

V. Signage, Emergency Information (List of posted signs and locations)

- *Describe location of the following mandated signage and verify posting*
 - Guidelines for Reporting Animal Concerns
 - Emergency contact information for Satellite Housing Location Personnel
 - Emergency contact for Veterinary assistance (OCV or other veterinarian)
 - Any biological, chemical, radiation or other hazard signage as required
 - Notification Protocol for Abnormal Animals

VI. Security

- *Describe how the facility is secured (electronic key, standard key and number)*
 - Campus [REDACTED] 41
 - Facility [REDACTED] 41

VII. Disaster Plan

- *See separate plan template below. Templates are available for all WSU locations*

References

Italics listed above are intended to be filled in with specific information about your species
Non italic wording should be left or modified to meet your specific needs

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

Washington State University-Puyallup

Disaster Plan

Animal Care

John Stark/Jen McIntyre, Aquatic Ecotoxicology Lab- Building 1046, WSU PREC

The primary goal for this document is to give general procedures and information for research animal care and support that are to be followed in the case of an emergency. This is secondary to the employee disaster plan and will only be implemented when conditions provide a safe working environment for employees.

Emergency Plan

WSU PREC telephone service does not have temporary emergency back-up power and would not work in situations of power failure, but the campus does receive cell phone coverage. Employees are strongly encouraged to sign up for WSU Alerts. Employees would be notified of problems by WSU Alerts and work plan by Lab PI and Head Tech (as of 2022, Jill Wetzel). Jill would also be responsible for notifying Facility Operations, EH & S, and OCV of emergency situations in a timely period. Employees would report to work, if they are physically and safely able to. In cases of extended power, water, or equipment failure animals would be triaged and cared for in priority. Water supply will continue functioning unless physically damaged. There are back up supplies of food. Jill Wetzel will supervise care for the animals during a disaster situation with advisory aid from OCV. In the absence of Jill, Jen McIntyre, John Stark, or anyone approved on ASAF 6904 would take charge of such care.

Phone List

Name	Title	Contact number
John Stark	PI	14
Jen McIntyre	PI	14
Jill Wetzel	Head Tech	14
Facility Operations		
EH & S		509-335-3041
Office of the Campus Veterinarian		509-330-1871 emergency cell 509-335-6246 office
Security		7-911
Fire Department		7-911

Commented [PA1]: We don't have a contact for this just yet. Working on it though!

Washington State University Standard of Veterinary Care for
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Evacuation Plan:

In case of emergency, everyone is required to leave the building immediately.

- For fire: exit the building and meet at the grassy lawn across the driveway from the bulb house, diagonal from WOSSA .
- For lahar: exit the building and go up the hill that parallels Fruitland (towards the white picket fence).
- For other emergencies, such as a break in a gas line, gather where instructed by FMO, or any other staff member.

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

Title: Animal Care Plan {Zebrafish, Coffin, Vancouver VCLS 320}

I. Procedure:

Daily (365 days a year without exception):

- Observe each animal and check for health concerns (*Guide* pg. 112).
- Clean and organize room, anterooms, and surrounding premises (*Guide* pg.72).
- Record daily completion of tasks, environmental monitoring, initial, and date daily animal care sheet (*submit copy of sheet*).
- Report on the OCV Health Database M-F.
 - Any abnormal animals must be reported to the Office of the Campus Veterinarian (Health database), or if an emergency call 5-6246 or 509-335-1871.
- Food type and method of water provision must be described along with where the food is stored and how storage conditions are monitored (humidity/temperature).
 - Adults: BioVita starter dry food, live artemia.
 - Larvae: powdered algae, live rotifers, live artemia, egg yolk powder (10-12 days post fertilization)
 - All commercial food is stored in a refrigerator in VCLS 320
 - Artemia and Rotifers are cultured on site in the fish facility.
 - Fish are fed twice daily M-F and once on the weekend and holidays.
- Pest monitoring and/or control devices (define type) and documented on daily care sheet.
 - Insect traps are placed on the floor and around the walls.
- For aquatic species, water quality assessments must be outline (table preferred).

Parameter	Recommended Range	Frequency
Temperature	26-29°C	Daily
pH	7-8	Daily
Conductivity	200-3000uS	Daily
Alkalinity	50-75 ppm	Monthly
Hardness	100-200 ppm	Monthly
Dissolved O2	6-8 ppm	Monthly
Ammonia NH3	<1.0 ppm (close to 0)	Monthly
Nitrate (NO ₃)	<50 ppm	Monthly
Nitrite (NO ₂)	<0.5ppm	Monthly
Chlorine	0	Monthly

Weekly:

- Describe what activities if any might be done once a week (cage changing, floor sweeping & mopping, water bottle changes, emergency eye wash flushing, etc.)
 - Clean or replace filters
 - Calibrate pH probe

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- Mop floors

As needed (1-1.5 months):

- Describe what activities if any might be done on an alternative interval or on an as needed basis (sanitizing feed barrels, changing filters, aquatic enclosure cleaning, water testing device calibration, stall stripping, etc)
 - Tank cleaning depending on algae growth, usually monthly

Facilities

- Describe where the animals will be housed (room, building, outdoor facilities).
 - Vancouver VCLS 320
- Provide date and findings of the ventilation assessment (air changes/hour and flow pattern) for interior facilities (Call the Animal Welfare Program for this information 57951)
 - N/A for aquatics
- Describe illumination and mechanism of controlling light cycle. When was the last measurement taken? (AWP)
 - 14:10 automatic light timer
 - Last light measurement: 3/28/21 See AWP for details
- Interior room surfaces shall be moisture-resistant, non-absorbent, impact resistant, and sanitizable.

Commented [CA1]: Should be 14:10.

Housing

- Describe animal housing (cage, pen, tank, etc.) size and material
 - Aquaneering 0.8, 1.8, 2.8, 6.0 L polycarbonate tanks
- Describe environment enrichment that will be provided
 - Flowing water and social housing
- Describe if the animals will be housed socially or individually
 - Described in ASAF 6024, fish can be held individually 1-2 weeks waiting for genotyping or high fat diet studies

II. Sanitation Monitoring

- Tanks are changed as needed, depending on algal growth, usually monthly. Tanks are scrubbed to remove algae, immersed in 3% bleach solution for at least an hour, then rinsed at least 4 times with DI water.
- Describe Sanitation Monitoring Program per SOP #5, if applicable. (Contact OCV at 509-335-6246 or or.ocv.alert@wsu.edu to enroll in sanitation monitoring)
 - Tanks, tank equipment are tested minimum of once a year typically twice yearly with ATP swabs

III. Waste Disposal

- Describe where carcasses will be disposed
 - Carcasses are stored in freezer in VCLS Rm 321 and then picked up by Waste Management for offsite disposal
- Describe where soiled bedding or for aquatics where water will be disposed and how?
 - Water from spawning of transgenic fish is bleached (% and time?) prior to disposal in the municipal wastewater system.
- Describe how hazardous waste is disposed if applicable
 - N/A

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IV. Animal Numbers and Tracking

- List the person's name that will be tracking animals on My Research
 - Lab reports animal numbers to the IACUC office every 1-3 months

V. Signage, Emergency Information (List of posted signs and locations)

- Describe location of the following mandated signage and verify posting
 - Guidelines for Reporting Animal Concerns
 - Emergency contact information for Satellite Housing Location Personnel
 - Emergency contact for Veterinary assistance (OCV or other veterinarian)
 - Any biological, chemical, radiation or other hazard signage as required
 - Notification Protocol for Abnormal Animals

VI. Security

- Describe how the facility is secured (electronic key, standard key and number)

◦ [REDACTED] 41
[REDACTED] 41

VII. Disaster Plan

• [REDACTED] 41
[REDACTED] 41
[REDACTED] 41
[REDACTED] 41
[REDACTED] 41
[REDACTED] 41
[REDACTED] 41

References

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**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

**Title: Animal Care Plan {Rainbow Trout, Brown Trout, Chinook and Coho Salmon/PIs: Carter/Phelps,
Carver Farm, Eastlick M00059, VBR G4}**

I. Procedure:

Daily (365 days a year without exception):

- *Observe each animal and check for health concerns (Guide pg. 112).*
- *Clean and organize room, anterooms, and surrounding premises (Guide pg. 72).*
- *Record daily completion of tasks, environmental monitoring, initial, and date daily animal care sheet (submit copy of sheet).*
 - **Type of Food:** BioVita starter mash, BioVita fry 2.5mm pellets and #3 crumbles, BioBrood 6.0mm pellet (Carver only)
 - **Where Stored:** Carver: freezer (chest) in Room # 103; Eastlick M0059 & VBRG4 refrigerator (small aliquots) walk in freezer Eastlick 278 stocks.
- *Pest monitoring and/or control devices (define type) and documented on daily care sheet.*
 - **Types of traps:** Sticky Insect traps or live snap traps
 - **Are they checked daily on care sheet:** yes
- Carver Farms: See Hatchery Maintenance -Carver SOP
 - In each tank check water inflow, level, clarity
 - Check air supply
 - Check water temperatures in settling tanks (warmest)
 - Clean nylon if present
 - Feed
 - Siphon settling tanks
 - Check pest traps
 - Fill out Daily Care Sheet
- Eastlick M0059 & VBR G4:
 - In each tank check water inflow, level, clarity, and temperature
 - Check air supply
 - Clear green baffles as needed
 - Feed
 - Check sticky trap
 - Check, clear/replace filter pads as needed
 - Fill out daily Care sheet

Bi-Weekly:

- Carver Farms: See Hatchery Maintenance-Carver SOP
 - Scrub fish tanks (alternate weeks with purge drains)
 - Purge drains (alternate weeks with scrub fish tanks)
 - Clean up sink and any dishes
 - Clean lids
 - Hose the floors after purging drains
- Eastlick M0059

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- Scrub out or change tanks as needed
- Mop floor

Monthly (Carver, Eastlick M0059, VBR G4):

- Water Quality Parameters

Parameter	Recommended Range
Temperature	12-15 °C
Ammonia NH ₃	<0.5 ppm
Nitrate (NO ₃)	<80 ppm
Nitrite (NO ₂)	<1ppm
Chlorine	0
Hardness	150-200 ppm (mg/L)
Alkalinity	120-180 ppm
pH	7.0-8.5

- *Report on the OCV Health Database Monthly Dead Animals.*
 - Any abnormal animals must be reported to the Office of the Campus Veterinarian (Health database), or if an emergency call 5-6246 or 509-335-1871.
- Empty garbage
- Clean feeders
- Clean nets, brushes, etc. with iodine

Facilities

- *Describe where the animals will be housed (room, building, outdoor facilities).*
 - Carver Farms Facility or Eastlick M0059
 - Indoor (Carver: central heating and swamp cooling); Eastlick (HVAC)
- *Provide date and findings of the ventilation assessment (air changes/hour and flow pattern) for interior facilities (Call the Animal Welfare Program for this information 57951)*
 - Not applicable
- *Describe illumination and mechanism of controlling light cycle. When was the last measurement taken? (AWP)*
 - Fluorescent light on Astronomic clock natural photoperiod
 - AWP does light measurements every 3 years
- *Interior room surfaces shall be moisture-resistant, non-absorbent, impact resistant, and sanitizable.*

Housing

- *Describe animal housing (cage, pen, tank, etc.) size and material*
 - M0059

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- 9L clear acrylic tanks
 - 18L clear acrylic tanks
- Carver Farms
 - Large gel coated fiberglass tanks (200 gallons)
 - Medium gel coated fiberglass tanks (80 gallons)
 - Small gel coated fiberglass tanks (12 gallons)
- VBR G4
 - Aquaneering rack system with tanks:
 - 30 Liter acrylic (home-made)
 - 7 Liter (standard Aquaneering tank)
 - 1.5 Liter (standard Aquaneering tank)
 - Fiberglass tanks (2 rows of 10 tanks?) 42 Liters
- Densities Defined:
 - Varies by genetic history of fish. Many of the trout reared in this facility are clonal lineages representing the diverse genetics of the species. Some lines are very domesticated and tolerate, even prefer crowding. Other lines are derived from wild or semi wild populations and exhibit territorial behavior and can be aggressive to other individuals. Loading densities are based on how the fish are behaving and growing. Fish are monitored daily for general health, including the state of their fins, body condition factor and evidence of aggression. Fish are either moved or thinned as needed.
 - If fish unable to posture in the tank without hitting the sides will be moved to larger tank
 - Fiberglass 42 Liter tank densities ~2 fish per liter (~10g fish)
 - Fiberglass 42 Liter tank densities ~1 fish per liter (20-30 g fish)
 - When fish >30g will move to Carver Farms
- *Describe environment enrichment that will be provided*
 - Socially housed fish and flowing water
- *Describe if the animals will be housed socially or individually*
 - Default is socially housing unless exempt due to aggressive behavior or research needs. Flow through water will always be provided.
 - Because of research study and genotyping fish, there may be a need to individually house fish for short periods of time.

II. Sanitation Monitoring

- *Describe Sanitation Monitoring Program per SOP #5, if applicable. (Contact OCV at 509-335-6246 or or.ocv.alert@wsu.edu to enroll in sanitation monitoring)*
 - Tanks that are cleaned will be monitored at least annually
 - Large fiberglass tanks that have fish perpetually are exempt from sanitation monitoring

III. Waste Disposal

- *Describe where carcasses will be disposed:* M0059 & VBR G4: STI waste box in Freezer Eastlick 278; Carver Freezer in anteroom. Small carcasses and soiled trash into STI stream. Large carcasses into WSU composting
- *Describe where soiled bedding or for aquatics where water will be disposed and how?*
 - M0059, Carver: water is disposed of in municipal system no treatment.

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- VBR G4 waste water is treated to a temperature of ? before the water goes into the municipal waste water system.
 - *Describe how hazardous waste is disposed if applicable: N/A*
- IV. **Animal Numbers and Tracking**
- *List the person's name that will be tracking animals on My Research*
 - Paul Wheeler will report animal numbers to the IACUC office every 3 months
- V. **Signage, Emergency Information (List of posted signs and locations)**
- *Describe location of the following mandated signage and verify posting*
 - Guidelines for Reporting Animal Concerns
 - Emergency contact information for Satellite Housing Location Personnel
 - Emergency contact for Veterinary assistance (OCV or other veterinarian)
 - Any biological, chemical, radiation or other hazard signage as required
 - Notification Protocol for Abnormal Animals
- VI. **Security**
- *Describe how the facility is secured (electronic key, standard key and number)*
 - 41
 - 41
 - 41
- VII. **Disaster Plan**
- See separate plan template below. Templates are available for all WSU locations
 - 41
 - 41
 - 41

References

Italics listed above are intended to be filled in with specific information about your species
Non italic wording should be left or modified to meet your specific needs

Washington State University-Pullman Disaster Plan Animal Care {PI} Lab- {location}

The primary goal for this document is to give general procedures and information for research animal care and support that are to be followed in the case of an emergency. This is secondary to the employee disaster plan and will only be implemented when conditions provide a safe working environment for employees.

Emergency Plan

WSU telephone service has temporary emergency back-up power and would work in situations of power failure. Employees would be notified of problems and work plan by Paul Wheeler. Paul Wheeler would also be responsible for notifying Facility Operations, EH & S, and OCV of emergency situations in a

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Satellite Animal Housing Location**

timely period. Employees would report to work, as they are physically able to. In cases of extended power failure and/or loss of HVAC, animals would be triaged and cared for in priority. Water supply will continue functioning unless physically damaged. There are back up supplies of food for the animals. Paul Wheeler will supervise care for the animals during a disaster situation with advisory aid from OCV. In the absence of Paul Wheeler, Michael Phelps would take charge of such care.

Phone List

Name	Title	Contact number
Michael Phelps	PI	14
Paul Wheeler	Animal Care Lead	14
38	38	38
Facility Operations		509-335-9000
EH & S		509-335-3041
Office of the Campus Veterinarian		509-330-1871 emergency cell 509-335-6246 office
Campus Security		911 (emergency) 509-335-8548(non- emergency)
Campus Fire Department		911 (emergency)

Evacuation Plan:

**In case of an emergency, such as a fire, everyone is required to leave the building immediately.
Calmly exit the building and meet at Eastlick or Carver parking lot.**

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

Title: Animal Care Plan {Rainbow Trout and Brown Trout, Carter, Carver Farm, Eastlick M00059}

I. Procedure:

Daily (365 days a year without exception):

- *Observe each animal and check for health concerns (Guide pg. 112).*
- *Clean and organize room, anterooms, and surrounding premises (Guide pg. 72).*
- *Record daily completion of tasks, environmental monitoring, initial, and date daily animal care sheet (submit copy of sheet).*
 - **Type of Food:** BioVita starter mash, BioVita fry 2.5mm pellets and #3 crumbles, BioBrood 6.0mm pellet (Carver only)
 - **Where Stored:** Carver: freezer (chest) in Room # 103; Eastlick M0059 refrigerator (small aliquots) walk in freezer Eastlick 278 stocks.
- *Pest monitoring and/or control devices (define type) and documented on daily care sheet.*
 - **Types of traps:** Sticky Insect traps or live snap traps
 - **Are they checked daily on care sheet:** yes
- Carver Farms: See Hatchery Maintenance -Carver SOP
 - In each tank check water inflow, level, clarity
 - Check air supply
 - Check water temperatures in settling tanks (warmest)
 - Clean nylon if present
 - Feed
 - Siphon settling tanks
 - Check pest traps
 - Fill out Daily Care Sheet
- Eastlick M0059:
 - In each tank check water inflow, level, clarity, and temperature
 - Check air supply
 - Clear green baffles as needed
 - Feed
 - Check sticky trap
 - Check, clear/replace filter pads as needed
 - Fill out daily Care sheet

Bi-Weekly:

- Carver Farms: See Hatchery Maintenance-Carver SOP
 - Scrub fish tanks (alternate weeks with purge drains)
 - Purge drains (alternate weeks with scrub fish tanks)
 - Clean up sink and any dishes
 - Clean lids
 - Hose the floors after purging drains
- Eastlick M0059
 - Scrub out or change tanks as needed

Date Approved/Initials: 4/16/21/GC

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

- Mop floor

Monthly (Carver and Eastlick M0059):

- Water Quality Parameters

Parameter	Recommended Range
Temperature	12-15 °C
Ammonia NH ₃	<0.5 ppm
Nitrate (NO ₃)	<80 ppm
Nitrite (NO ₂)	<1ppm
Chlorine	0
Hardness	150-200 ppm (mg/L)
Alkalinity	120-180 ppm
pH	7.0-8.5

- *Report on the OCV Health Database Monthly Dead Animals.*
 - Any abnormal animals must be reported to the Office of the Campus Veterinarian (Health database), or if an emergency call 5-6246 or 509-335-1871.
- Empty garbage
- Clean feeders
- Clean nets, brushes, etc. with iodine

Facilities

- *Describe where the animals will be housed (room, building, outdoor facilities).*
 - Carver Farms Facility or Eastlick M0059
 - Indoor (Carver: central heating and swamp cooling); Eastlick (HVAC)
- *Provide date and findings of the ventilation assessment (air changes/hour and flow pattern) for interior facilities (Call the Animal Welfare Program for this information 57951)*
 - Not applicable
- *Describe illumination and mechanism of controlling light cycle. When was the last measurement taken? (AWP)*
 - Fluorescent light on Astronomic clock natural photoperiod
 - AWP does light measurements every 3 years
- *Interior room surfaces shall be moisture-resistant, non-absorbent, impact resistant, and sanitizable.*

Housing

- *Describe animal housing (cage, pen, tank, etc.) size and material*
 - M0059
 - 9L clear acrylic tanks

Date Approved/Initials: 4/16/21/GC

Washington State University Standard of Veterinary Care for Satellite Animal Housing Location

- 18L clear acrylic tanks
- Carver Farms
 - Large gel coated fiberglass tanks (200 gallons)
 - Medium gel coated fiberglass tanks (80 gallons)
 - Small gel coated fiberglass tanks (12 gallons)
- Densities Defined:
 - Varies by genetic history of fish. Many of the trout reared in this facility are clonal lineages representing the diverse genetics of the species. Some lines are very domesticated and tolerate, even prefer crowding. Other lines are derived from wild or semi wild populations and exhibit territorial behavior and can be aggressive to other individuals. Loading densities are based on how the fish are behaving and growing. Fish are monitored daily for general health, including the state of their fins, body condition factor and evidence of aggression. Fish are either moved or thinned as needed.
 - If fish unable to posture in the tank without hitting the sides will be moved to larger tank
- *Describe environment enrichment that will be provided*
 - Socially housed fish and flowing water
- *Describe if the animals will be housed socially or individually*
 - Default is socially housing unless exempt due to aggressive behavior or research needs. Flow through water will always be provided.

II. Sanitation Monitoring

- *Describe Sanitation Monitoring Program per SOP #5, if applicable. (Contact OCV at 509-335-6246 or or.ocv.alert@wsu.edu to enroll in sanitation monitoring)*
 - Tanks that are cleaned will be monitored at least annually
 - Large fiberglass tanks that have fish perpetually are exempt from sanitation monitoring

III. Waste Disposal

- *Describe where carcasses will be disposed:* M0059: STI waste box in Freezer Eastlick 278; Carver Freezer in anteroom. Small carcasses and soiled trash into STI stream. Large carcasses into WSU composting
- *Describe where soiled bedding or for aquatics where water will be disposed and how?*
 - M0059 and Carver: water is disposed of in municipal system no treatment.
- *Describe how hazardous waste is disposed if applicable:* N/A

IV. Animal Numbers and Tracking

- *List the person's name that will be tracking animals on My Research*
 - Paul Wheeler will report animal numbers to the IACUC office every 3 months

V. Signage, Emergency Information (List of posted signs and locations)

- *Describe location of the following mandated signage and verify posting*
 - Guidelines for Reporting Animal Concerns
 - Emergency contact information for Satellite Housing Location Personnel
 - Emergency contact for Veterinary assistance (OCV or other veterinarian)
 - Any biological, chemical, radiation or other hazard signage as required
 - Notification Protocol for Abnormal Animals

VI. Security

Date Approved/Initials: 4/16/21/GC

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

- Describe how the facility is secured (electronic key, standard key and number)
- [REDACTED] 41
- [REDACTED] 41

VII. Disaster Plan

- See separate plan template below. Templates are available for all WSU locations
- Backup Power for Eastlick M0059 is on Feeder 13
- Backup Power for Carver is an onsite generator that is checked weekly for proper function.

References

Italics listed above are intended to be filled in with specific information about your species
Non italic wording should be left or modified to meet your specific needs

**Washington State University-Pullman
Disaster Plan
Animal Care
{PI} Lab- {location}**

The primary goal for this document is to give general procedures and information for research animal care and support that are to be followed in the case of an emergency. This is secondary to the employee disaster plan and will only be implemented when conditions provide a safe working environment for employees.

Emergency Plan

WSU telephone service has temporary emergency back-up power and would work in situations of power failure. Employees would be notified of problems and work plan by Paul Wheeler. Paul Wheeler would also be responsible for notifying Facility Operations, EH & S, and OCV of emergency situations in a timely period. Employees would report to work, as they are physically able to. In cases of extended power failure and/or loss of HVAC, animals would be triaged and cared for in priority. Water supply will continue functioning unless physically damaged. There are back up supplies of food for the animals. Paul Wheeler will supervise care for the animals during a disaster situation with advisory aid from OCV. In the absence of Paul Wheeler, Michael Phelps would take charge of such care.

Phone List

Name	Title	Contact number
Michael Phelps	PI	[REDACTED] 14
Paul Wheeler	Animal Care Lead	[REDACTED] 14
[REDACTED] 38	[REDACTED] 38	[REDACTED] 38
Facility Operations		509-335-9000

Date Approved/Initials: 4/16/21/GC

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

EH & S		509-335-3041
Office of the Campus Veterinarian		509-330-1871 emergency cell 509-335-6246 office
Campus Security		911 (emergency) 509-335-8548(non- emergency)
Campus Fire Department		911 (emergency)

Evacuation Plan:

**In case of an emergency, such as a fire, everyone is required to leave the building immediately.
Calmly exit the building and meet at Eastlick or Carver parking lot.**

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

Title: Animal Care Plan Salmonid fishes, Phelps, Carver Farm, Eastlick M00059}

I. Procedure:

Daily (365 days a year without exception):

- *Observe each animal and check for health concerns (Guide pg. 112).*
- *Clean and organize room, anterooms, and surrounding premises (Guide pg. 72).*
- *Record daily completion of tasks, environmental monitoring, initial, and date daily animal care sheet (submit copy of sheet).*
 - **Type of Food:** BioVita starter mash, BioVita fry 2.5mm pellets and #3 crumbles, BioBrood 6.0mm pellet (Carver only)
 - **Where Stored:** Carver: freezer (chest) in Room # 103; Eastlick M0059 refrigerator (small aliquots) walk in freezer Eastlick 278 stocks.
- *Pest monitoring and/or control devices (define type) and documented on daily care sheet.*
 - **Types of traps:** Sticky Insect traps or live snap traps
 - **Are they checked daily on care sheet:** yes
- Carver Farms: See Hatchery Maintenance -Carver SOP
 - In each tank check water inflow, level, clarity
 - Check air supply
 - Check water temperatures in settling tanks (warmest)
 - Clean nylon if present
 - Feed
 - Siphon settling tanks
 - Check pest traps
 - Fill out Daily Care Sheet
- Eastlick M0059:
 - In each tank check water inflow, level, clarity, and temperature
 - Check air supply
 - Clear green baffles as needed
 - Feed
 - Check sticky trap
 - Check, clear/replace filter pads as needed
 - Fill out daily Care sheet

Bi-Weekly:

- Carver Farms: See Hatchery Maintenance-Carver SOP
 - Scrub fish tanks (alternate weeks with purge drains)
 - Purge drains (alternate weeks with scrub fish tanks)
 - Clean up sink and any dishes
 - Clean lids
 - Hose the floors after purging drains
- Eastlick M0059
 - Scrub out or change tanks as needed

Date Approved/Initials: 4/16/21/GC

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

- Mop floor

Monthly (Carver and Eastlick M0059):

- Water Quality Parameters

Parameter	Recommended Range
Temperature	12-15 °C
Ammonia NH ₃	<0.5 ppm
Nitrate (NO ₃)	<80 ppm
Nitrite (NO ₂)	<1ppm
Chlorine	0
Hardness	150-200 ppm (mg/L)
Alkalinity	120-180 ppm
pH	7.0-8.5

- *Report on the OCV Health Database Monthly Dead Animals.*
 - Any abnormal animals must be reported to the Office of the Campus Veterinarian (Health database), or if an emergency call 5-6246 or 509-335-1871.
- Empty garbage
- Clean feeders
- Clean nets, brushes, etc. with iodine

Facilities

- *Describe where the animals will be housed (room, building, outdoor facilities).*
 - Carver Farms Facility or Eastlick M0059
 - Indoor (Carver: central heating and swamp cooling); Eastlick (HVAC)
- *Provide date and findings of the ventilation assessment (air changes/hour and flow pattern) for interior facilities (Call the Animal Welfare Program for this information 57951)*
 - Not applicable
- *Describe illumination and mechanism of controlling light cycle. When was the last measurement taken? (AWP)*
 - Fluorescent light on Astronomic clock natural photoperiod
 - AWP does light measurements every 3 years
- *Interior room surfaces shall be moisture-resistant, non-absorbent, impact resistant, and sanitizable.*

Housing

- *Describe animal housing (cage, pen, tank, etc.) size and material*
 - M0059
 - 9L clear acrylic tanks

Date Approved/Initials: 4/16/21/GC

Washington State University Standard of Veterinary Care for Satellite Animal Housing Location

- 18L clear acrylic tanks
- Carver Farms
 - Large gel coated fiberglass tanks (200 gallons)
 - Medium gel coated fiberglass tanks (80 gallons)
 - Small gel coated fiberglass tanks (12 gallons)
- Densities Defined:
 - Varies by genetic history of fish. Many of the trout reared in this facility are clonal lineages representing the diverse genetics of the species. Some lines are very domesticated and tolerate, even prefer crowding. Other lines are derived from wild or semi wild populations and exhibit territorial behavior and can be aggressive to other individuals. Loading densities are based on how the fish are behaving and growing. Fish are monitored daily for general health, including the state of their fins, body condition factor and evidence of aggression. Fish are either moved or thinned as needed.
 - If fish unable to posture in the tank without hitting the sides will be moved to larger tank
- *Describe environment enrichment that will be provided*
 - Socially housed fish and flowing water
- *Describe if the animals will be housed socially or individually*
 - Default is socially housing unless exempt due to aggressive behavior or research needs. Flow through water will always be provided.

II. Sanitation Monitoring

- *Describe Sanitation Monitoring Program per SOP #5, if applicable. (Contact OCV at 509-335-6246 or or.ocv.alert@wsu.edu to enroll in sanitation monitoring)*
 - Tanks that are cleaned will be monitored at least annually
 - Large fiberglass tanks that have fish perpetually are exempt from sanitation monitoring

III. Waste Disposal

- *Describe where carcasses will be disposed:* M0059: STI waste box in Freezer Eastlick 278; Carver Freezer in anteroom. Small carcasses and soiled trash into STI stream. Large carcasses into WSU composting
- *Describe where soiled bedding or for aquatics where water will be disposed and how?*
 - M0059 and Carver: water is disposed of in municipal system no treatment.
- *Describe how hazardous waste is disposed if applicable:* N/A

IV. Animal Numbers and Tracking

- *List the person's name that will be tracking animals on My Research*
 - Paul Wheeler will report animal numbers to the IACUC office every 3 months

V. Signage, Emergency Information (List of posted signs and locations)

- *Describe location of the following mandated signage and verify posting*
 - Guidelines for Reporting Animal Concerns
 - Emergency contact information for Satellite Housing Location Personnel
 - Emergency contact for Veterinary assistance (OCV or other veterinarian)
 - Any biological, chemical, radiation or other hazard signage as required
 - Notification Protocol for Abnormal Animals

VI. Security

Date Approved/Initials: 4/16/21/GC

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

- Describe how the facility is secured (electronic key, standard key and number)
- 41
- 41

VII. Disaster Plan

- See separate plan template below. Templates are available for all WSU locations
- Backup Power for Eastlick M0059 is on Feeder 13
- Backup Power for Carver is an onsite generator that is checked weekly for proper function.

References

Italics listed above are intended to be filled in with specific information about your species
Non italic wording should be left or modified to meet your specific needs

**Washington State University-Pullman
Disaster Plan
Animal Care
{PI} Lab- {location}**

The primary goal for this document is to give general procedures and information for research animal care and support that are to be followed in the case of an emergency. This is secondary to the employee disaster plan and will only be implemented when conditions provide a safe working environment for employees.

Emergency Plan

WSU telephone service has temporary emergency back-up power and would work in situations of power failure. Employees would be notified of problems and work plan by Paul Wheeler. Paul Wheeler would also be responsible for notifying Facility Operations, EH & S, and OCV of emergency situations in a timely period. Employees would report to work, as they are physically able to. In cases of extended power failure and/or loss of HVAC, animals would be triaged and cared for in priority. Water supply will continue functioning unless physically damaged. There are back up supplies of food for the animals. Paul Wheeler will supervise care for the animals during a disaster situation with advisory aid from OCV. In the absence of Paul Wheeler, Michael Phelps would take charge of such care.

Phone List

Name	Title	Contact number
Michael Phelps	PI	14
Paul Wheeler	Animal Care Lead	14
38	38	38
Facility Operations		509-335-9000

Date Approved/Initials: 4/16/21/GC

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

EH & S		509-335-3041
Office of the Campus Veterinarian		509-330-1871 emergency cell 509-335-6246 office
Campus Security		911 (emergency) 509-335-8548(non- emergency)
Campus Fire Department		911 (emergency)

Evacuation Plan:

**In case of an emergency, such as a fire, everyone is required to leave the building immediately.
Calmly exit the building and meet at Eastlick or Carver parking lot.**

Washington State University

Disaster Plan

Animal Care

Goldberg Lab- Eastlick B74A

The primary goal for this document is to give general procedures and information for research animal care and support that are to be followed in the case of an emergency. This is secondary to the employee disaster plan and will only be implemented when conditions provide a safe working environment for employees.

Emergency Plan

WSU telephone service has temporary emergency back-up power and would work in situations of power failure. Employees would be notified of problems and work plan by [REDACTED] 38 [REDACTED] 38 would also be responsible for notifying Facility Operations, EH & S, and OCV of emergency situations in a timely period. Employees would report to work, as they are physically able to. In cases of extended power failure and/or loss of HVAC, animals would be triaged and cared for in priority. Water supply will continue functioning unless physically damaged. There are back up supplies of food and bedding for the animals. [REDACTED] 38 will supervise care for the animals during a disasters situation with advisory aid from OCV. In the absence of [REDACTED] 38 [REDACTED] 38 Caren Goldberg would take charge of such care.

Phone List

Name	Title	Contact number
Caren Goldberg	PI	14
[REDACTED] 38	[REDACTED] 38	38
Facility Operations		509-335-9000
EH & S		509-335-3041
Office of the Campus Veterinarian		509-330-1871 emergency cell 509-335-6246 office
Campus Security		911 (emergency) 509-335-8548(non-emergency)
Campus Fire Department		911 (emergency)

Evacuation Plan:

In case of an emergency, such as a fire, everyone is required to leave the building immediately. Calmly exit the building and meet in the open grassy area to the northeast of Eastlick Hall (north of Abelson Hall). This way we can verify that everyone has exited the building safely.

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

Title: Animal Care Plan {Betta splendens, Meghan Martin, VSCI 117}

I. Procedure:

Daily (365 days a year without exception):

- Observe each animal and check for health concerns (*Guide* pg. 112).
- Clean and organize room, anterooms, and surrounding premises (*Guide* pg. 72).
- Record daily completion of tasks, environmental monitoring, initial, and date daily animal care sheet (*submit Betta Splenden Daily Care Sheet*).
- Report on the OCV Health Database M-F.
 - Any abnormal animals must be reported to the Office of the Campus Veterinarian (Health database), or if an emergency call 5-6246 or 509-335-1871.
- Betta splendens will be fed once daily 3-6 pellets with TetraBetta Floating Mini Pellets (or equivalent). Number of pellets will be adjusted based on the amount of food consumed within 2-3 minutes
- Food will be stored in the lower cabinet at room temperature 68 F to 80 F and a relative humidity of 30% to 60%.
- Betta splendens will be visually monitored daily on food consumption, activity, color, buoyancy, discoloration (large dots), and fin positions (close to body or reduced size indication of illness). Staff will monitor closely for common pests and diseases associated with aquariums such as fin rot, swim bladder issues (difficulty swimming), dropsy, and Ichthyophthirius multifiliis. Findings will be documented on daily care sheet.
- Water temperature will be assessed daily and water quality will be assessed weekly as indicated by API 5 in 1 Freshwater Aquarium Test Strips (or similar product) which monitors five key water parameters—pH, nitrite, nitrate, carbonate and general hardness. Water parameters will remain within the green zones in the following water parameter table. Ideal parameters are: **Temperature:** 78 degrees, **Nitrates:** < 40, **Nitrites:** 0, **Ammonia:** 0, **pH:** 7.0. Conductivity, DO, and TSS will not be monitored due to short term nature of this project (approximately 3 weeks).

Parameter	Testing Frequency	Recommended Range	Adjustment if Low	Adjustment if High
Temperature	Daily	24.5-28 3°C 76.1-82.9 F	Increase heater thermostat	Decrease heater thermostat
pH	Daily	6.5-7.5	Slow addition of sodium bicarbonate solution	Slow addition of dilute hydrochloride
Conductivity	Monthly	900-1100 uS	Slow addition of sea salt solution	Slow addition of RO/DI purified water
Salinity	Weekly		Slow addition of sea salt solution	Slow addition of RO/DI purified
Alkalinity	Weekly	53.8-89.4 ppm	Slow addition of sodium bicarbonate solution	Slow addition of RO/DI purified water
Hardness	Weekly	50-66.7 ppm (mg/L)	Slow addition of sea salt solution	Slow addition of RO/DI purified water
Dissolved O2	Weekly	6-8 ppm near saturation	Increase aeration, remove waste solids, increase water exchange, decrease stocking density	Reduce aeration, investigate for possible gas bubble disease
Carbon dioxide	Weekly	Close to 0 ppm as possible action at 15 ppm	NA	Increase aeration, remove waste solids, increase water exchange ventilate area

Washington State University Standard of Veterinary Care for Satellite Animal Housing Location

Total Ammonia Nitrogen (TAN)	Weekly	Close to 0 ppm as possible, less than 1 ppm	NA	Remove waste solids, increase water exchange, check pH and alkalinity
Nitrite (NO ₂ ⁻)	Weekly	Close to 0 ppm as possible, less than 0.5ppm	NA	Remove waste solids, increase water exchange, check pH and alkalinity, slow addition of sea salt solution
Nitrate (NO ₃ ⁻)	Weekly	Less than 40 ppm	NA	Increase water exchange

Weekly:

- The tanks will be cleaned every day and topped off with fresh water. To clean, the bottom debris will be sucked out with a serological pipette removing approximately 25% of the water, which is replaced with spring water.
- Water quality will be assessed weekly via API 5 in 1 Freshwater Aquarium Test Strips
- Floors will be swept and mopped once a week and counters wiped down with an all-purpose general cleaner.

Facilities

- Animals will be housed in VSCI Rm 117
- Light measurements will be measured in the spring of 2022.
- Interior room surfaces shall be moisture-resistant, non-absorbent, impact resistant, and sanitizable.

Housing

- Betta splendens will be housed in Aqueon Betta Fish Tanks (5 x 9 x 7 inches). Fish will be housed in tanks with an opaque separator (tanks have slots to stabilize the opaque separator; 2 fish to each tank) and as much distance between the tanks as possible to avoid undue stress. Laminated colored paper will be used to create a solid visual barrier between fish.
- Fish will have gravel and small plastic aquarium plants in each aquarium.

II. Sanitation Monitoring

- Between fish acquisitions, tanks and equipment will be sanitized with bleach by spraying the inside of the aquarium, allowing to sit for 10-15 minutes before rinsing thoroughly. Tanks and equipment will be allowed to air dry for 24 hours before being used. Contact OCV at 509-335-6246 or or.ocv.alert@wsu.edu to enroll in sanitation monitoring.
 - Tanks and equipment will be tested at least annually with ATP testing.

III. Waste Disposal

- Carcasses will be disposed by first freezing at -80F until Waste Management (outside vendor) comes for pickup and removal
- Dirty water will be flushed down the sink.

IV. Animal Numbers and Tracking

- Meghan Martin and Dawn Freeman

V. Signage, Emergency Information (List of posted signs and locations)

- Signs are posted on the door to VSCI Rm 117
 - Guidelines for Reporting Animal Concerns (Guideline #2)
 - Emergency contact information for Satellite Housing Location Personnel
 - Any biological, chemical, radiation or other hazard signage as required
 - Notification Protocol for Abnormal Behavior/Conditions

VI. Security

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VII. Disaster Plan

- See separate plan template below.

Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location

Washington State University-Vancouver
Disaster Plan
Animal Care
Martin Lab- VSCI Rm 117

The primary goal for this document is to give general procedures and information for research animal care and support that are to be followed in the case of an emergency. This is secondary to the employee disaster plan and will only be implemented when conditions provide a safe working environment for employees.

Emergency Plan

WSU telephone service has temporary emergency back-up power and would work in situations of power failure. Employees would be notified of problems and work plan by {Meghan Martin}. {Meghan Martin} would also be responsible for notifying Facility Operations, EH & S, and OCV of emergency situations in a timely period. Employees would report to work, as they are physically able to. In cases of extended power failure and/or loss of HVAC, animals would be triaged and cared for in priority. Water supply will continue functioning unless physically damaged. There are back up supplies of food and bedding for the animals. {Meghan Martin} will supervise care for the animals during a disaster situation with advisory aid from OCV. In the absence of {Meghan Martin, Dawn Freeman} would take charge of such care.

Phone List

Name	Title	Contact number
Meghan Martin	PI	14
Dawn Freeman	Animal Care Lead	14 (text please)
Facility Operations		360-546-9000
EH & S		360-546-9706
Office of the Campus Veterinarian		509-330-1871 emergency cell 509-335-6246 office
Campus Security		360-546-9001
Campus Fire Department		911

Evacuation Plan:

In case of an emergency, such as a fire, everyone is required to leave the building immediately. Calmly exit the building and meet at the Orange Parking Lot alongside the Student Services Building.

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

Title: Animal Care Plan {*Danio rerio*, Sweet , Tri Cities Bio Sci 0171, Collaboration Hall Rm. 212}

I. Procedure:

Daily (365 days a year without exception):

- Observe each animal and check for health concerns (*Guide* pg. 112).
- Clean and organize room, anterooms, and surrounding premises (*Guide* pg. 72).
- Record daily completion of tasks, environmental monitoring, initial, and date daily animal care sheet (*submit copy of sheet*).
- Report on the OCV Health Database M-F.
 - Any abnormal animals must be reported to the Office of the Campus Veterinarian (Health database), or if an emergency call 5-6246 or 509-335-1871.
- *Food type and method of water provision must be described along with where the food is stored and how storage conditions are monitored (humidity/temperature).*
 - *Currently adult fish are feed Tetramin Flake which are stored at room temp. in room 0171.*
- *Pest monitoring and/or control devices (define type) and documented on daily care sheet.*
 - *Any pest management is used? Pest monitoring will be conducted regularly during daily zebrafish maintenance. Pest prevention measures will be taken such as daily and weekly cleaning and decluttering of the animal housing area and room. Pest prevention measures will be taken to make sure the animal housing room is sealed where appropriate from entrance of pests and predators. No chemicals or pesticides will be used in the animal housing room without consultation of the PI. Facilities will be contacted if pests are observed and appropriate measure will be taken to resolve the pest concern.*
- *For aquatic species, water quality assessments must be outline (table preferred).*
 - *See SOP Zebrafish TriCities*

Weekly:

- *Describe what activities if any might be done once a week (cage changing, floor sweeping & mopping, water bottle changes, emergency eye wash flushing, etc.)*
 - *Floors are sweep weekly*

4-6 weeks:

- *Describe what activities if any might be done on an alternative interval or on an as needed basis (sanitizing feed barrels, changing filters, aquatic enclosure cleaning, water testing device calibration, stall stripping, etc)*
 - *Tanks cleaned and changed as outlined in SOP Zebrafish TriCities*

Facilities

- *Describe where the animals will be housed (room, building, outdoor facilities).*
 - *TriCities Bioscience 0171*

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

- Collaboration Hall bldg. rm. 212
- Provide date and findings of the ventilation assessment (air changes/hour and flow pattern) for interior facilities (Call the Animal Welfare Program for this information 57951)
 - Last HVAC data was collected 2018
- Describe illumination and mechanism of controlling light cycle. When was the last measurement taken? (AWP)
 - 14:10 light cycle, controlled through use of timer-controlled light
 - 2018 Last AAALAC visit
- Interior room surfaces shall be moisture-resistant, non-absorbent, impact resistant, and sanitizable.

Housing

- Describe animal housing (cage, pen, tank, etc.) size and material
 - Housing density will follow the SOP Zebrafish TriCities
 - What size tanks do you use? Tank sizes range from 2.5 gallon- 20 gallon tanks
- Describe environment enrichment that will be provided
 - EE will follow the SOP Zebrafish Tricities
- Describe if the animals will be housed socially or individually
 - Socially

II. Sanitation Monitoring

- Describe Sanitation Monitoring Program per SOP #5, if applicable. (Contact OCV at 509-335-6246 or or.ocv.alert@wsu.edu to enroll in sanitation monitoring)
 - Tanks will be assessed once a year in the sanitation monitoring program
 - All tanks will be cleaned and disinfected as outlined in SOP Zebrafish TriCities

III. Waste Disposal

- Describe where carcasses will be disposed
 - Carcasses are stored in what freezer?
 - Freezer in BSEL 172 lab prep area
 - Then they are placed in local landfill
- Describe where soiled bedding or for aquatics where water will be disposed and how?
 - Waster water will go into the municipal water system
- Describe how hazardous waste is disposed if applicable
 - N/A

IV. Animal Numbers and Tracking

- List the person's name that will be tracking animals on My Research
 - Dr. Sweet will report animal numbers to the AWO after the class course is completed.

V. Signage, Emergency Information (List of posted signs and locations)

- Describe location of the following mandated signage and verify posting
 - Guidelines for Reporting Animal Concerns
 - Emergency contact information for Satellite Housing Location Personnel
 - Emergency contact for Veterinary assistance (OCV or other veterinarian)
 - Any biological, chemical, radiation or other hazard signage as required
 - Notification Protocol for Abnormal Animals

VI. Security

- Describe how the facility is secured (electronic key, standard key and number)

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

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VII. Disaster Plan

- See separate plan template below. Templates are available for all WSU locations

In the event of a power outage, how will the fish systems be handled? During electrical power outages and mechanical equipment failure PI will be contacted to monitor fish and set up any necessary backup requirements. In the case of an extended power outage, water oxygenation will be achieved through battery operated air stone or building airlines.

References

Italics listed above are intended to be filled in with specific information about your species
Non italic wording should be left or modified to meet your specific needs

**Washington State University-Pullman
Disaster Plan**

Animal Care

Elly Sweet Lab- WSU TriCities, Richland, Washington

The primary goal for this document is to give general procedures and information for research animal care and support that are to be followed in the case of an emergency. This is secondary to the employee disaster plan and will only be implemented when conditions provide a safe working environment for employees.

Emergency Plan

WSU telephone service has temporary emergency back-up power and would work in situations of power failure. Employees would be notified of problems and work plan by {INSERT NAME}. {INSERT NAME} would also be responsible for notifying Facility Operations, EH & S, and OCV of emergency situations in a timely period. Employees would report to work, as they are physically able to. In cases of extended power failure and/or loss of HVAC, animals would be triaged and cared for in priority. Water supply will continue functioning unless physically damaged. There are back up supplies of food and bedding for the animals. {INSERT NAME} will supervise care for the animals during a disasters situation with advisory aid from OCV. In the absence of {INSERT NAME, INSERT NAME} would take charge of such care.

Phone List

Name	Title	Contact number
Elly Sweet	PI	
	Animal Care Lead	
Facility Operations		509- 509-372-7160
EH & S		509- 372-7163

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

Office of the Campus Veterinarian		509-330-1871 emergency cell 509-335-6246 office
Campus Security		911 (emergency) 509- 372-7234. (non-emergency)
Campus Fire Department		911 (emergency)

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Evacuation Plan:

**In case of an emergency, such as a fire, everyone is required to leave the building immediately.
Calmly exit the building and meet at {INSERT LOCATION }.**

Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location

Title: Animal Care Plan {*Danio rerio*, Sweet , Tri Cities Bio Sci 0171}

I. Procedure:

Daily (365 days a year without exception):

- Observe each animal and check for health concerns (*Guide* pg. 112).
- Clean and organize room, anterooms, and surrounding premises (*Guide* pg.72).
- Record daily completion of tasks, environmental monitoring, initial, and date daily animal care sheet (*submit copy of sheet*).
- Report on the OCV Health Database M-F.
 - Any abnormal animals must be reported to the Office of the Campus Veterinarian (Health database), or if an emergency call 5-6246 or 509-335-1871.
- Food type and method of water provision must be described along with where the food is stored and how storage conditions are monitored (humidity/temperature).
 - Currently adult fish are feed Tetramin Flake which are stored at room temp. in room 0171.
- Pest monitoring and/or control devices (define type) and documented on daily care sheet.
 - Any pest management is used?
- For aquatic species, water quality assessments must be outline (table preferred).
 - See SOP Zebrafish TriCities

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Weekly:

- Describe what activities if any might be done once a week (cage changing, floor sweeping & mopping, water bottle changes, emergency eye wash flushing, etc.)
 - Weekly floors are sweep?

4-6 weeks:

- Describe what activities if any might be done on an alternative interval or on an as needed basis (sanitizing feed barrels, changing filters, aquatic enclosure cleaning, water testing device calibration, stall stripping, etc)
 - Tanks cleaned and changed as outlined in SOP Zebrafish TriCities

Facilities

- Describe where the animals will be housed (room, building, outdoor facilities).
 - TriCities Bioscience 0171
- Provide date and findings of the ventilation assessment (air changes/hour and flow pattern) for interior facilities(Call the Animal Welfare Program for this information 57951)
 - Last HVAC data was collected 2018
- Describe illumination and mechanism of controlling light cycle. When was the last measurement taken? (AWP)
 - 12:12 light cycle, manual?

Date Approved/Initials:

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Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location

- 2018 Last AAALAC visit
- Interior room surfaces shall be moisture-resistant, non-absorbent, impact resistant, and sanitizable.

Housing

- Describe animal housing (cage, pen, tank, etc.) size and material
 - Housing density will follow the SOP Zebrafish TriCities
 - What size tanks do you use?
- Describe environment enrichment that will be provided
 - EE will follow the SOP Zebrafish Tricities
- Describe if the animals will be housed socially or individually
 - Socially

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II. Sanitation Monitoring

- Describe Sanitation Monitoring Program per SOP #5, if applicable. (Contact OCV at 509-335-6246 or pr.ocv.alert@wsu.edu to enroll in sanitation monitoring)
 - Tanks will be assessed once a year in the sanitation monitoring program
 - All tanks will be cleaned and disinfected as outlined in SOP Zebrafish TriCities

III. Waste Disposal

- Describe where carcasses will be disposed
 - Carcasses are stored in what freezer?
 - Then they are placed in local landfill
- Describe where soiled bedding or for aquatics where water will be disposed and how?
 - Waster water will go into the municipal water system
- Describe how hazardous waste is disposed if applicable
 - N/A

IV. Animal Numbers and Tracking

- List the person's name that will be tracking animals on My Research
 - Dr. Sweet will report animal numbers to the AWO after the class course is completed.

V. Signage, Emergency Information (List of posted signs and locations)

- Describe location of the following mandated signage and verify posting
 - Guidelines for Reporting Animal Concerns
 - Emergency contact information for Satellite Housing Location Personnel
 - Emergency contact for Veterinary assistance (OCV or other veterinarian)
 - Any biological, chemical, radiation or other hazard signage as required
 - Notification Protocol for Abnormal Animals

VI. Security

- Describe how the facility is secured (electronic key, standard key and number)
- Can you fill in this information? 41

VII. Disaster Plan

- See separate plan template below. Templates are available for all WSU locations.
- In the event of a power outage, how will the fish systems be handled?

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References

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Date Approved/Initials:

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Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location

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Washington State University-Pullman
Disaster Plan
Animal Care
{P} Lab- {location}

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Emergency Plan

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Phone List

Name	Title	Contact number
Elly Sweet	PI	
	Animal Care Lead	
Facility Operations		509-
EH & S		509-
Office of the Campus Veterinarian		509-330-1871 emergency cell 509-335-6246 office
Campus Security		911 (emergency) 509-(non-emergency)
Campus Department	Fire	911 (emergency)

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Evacuation Plan:

In case of an emergency, such as a fire, everyone is required to leave the building immediately.
Calmly exit the building and meet at {INSERT LOCATION}.

Date Approved/Initials:

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

Title: Animal Care Plan {*Danio rerio*, Sweet , Tri Cities Bio Sci 0171}

I. Procedure:

Daily (365 days a year without exception):

- Observe each animal and check for health concerns (*Guide* pg. 112).
- Clean and organize room, anterooms, and surrounding premises (*Guide* pg. 72).
- Record daily completion of tasks, environmental monitoring, initial, and date daily animal care sheet (*submit copy of sheet*).
- Report on the OCV Health Database M-F.
 - Any abnormal animals must be reported to the Office of the Campus Veterinarian (Health database), or if an emergency call 5-6246 or 509-335-1871.
- *Food type and method of water provision must be described along with where the food is stored and how storage conditions are monitored (humidity/temperature).*
 - *Currently adult fish are feed Tetramin Flake which are stored at room temp. in room 0171.*
- *Pest monitoring and/or control devices (define type) and documented on daily care sheet.*
 - *Any pest management is used? Pest monitoring will be conducted regularly during daily zebrafish maintenance. Pest prevention measures will be taken such as daily and weekly cleaning and decluttering of the animal housing area and room. Pest prevention measures will be taken to make sure the animal housing room is sealed where appropriate from entrance of pests and predators. No chemicals or pesticides will be used in the animal housing room without consultation of the PI. Facilities will be contacted if pests are observed and appropriate measure will be taken to resolve the pest concern.*
- *For aquatic species, water quality assessments must be outline (table preferred).*
 - *See SOP Zebrafish TriCities*

Weekly:

- *Describe what activities if any might be done once a week (cage changing, floor sweeping & mopping, water bottle changes, emergency eye wash flushing, etc.)*
 - *Floors are sweep weekly*

4-6 weeks:

- *Describe what activities if any might be done on an alternative interval or on an as needed basis (sanitizing feed barrels, changing filters, aquatic enclosure cleaning, water testing device calibration, stall stripping, etc)*
 - *Tanks cleaned and changed as outlined in SOP Zebrafish TriCities*

Facilities

- *Describe where the animals will be housed (room, building, outdoor facilities).*
 - *TriCities Bioscience 0171*

**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

- *Provide date and findings of the ventilation assessment (air changes/hour and flow pattern) for interior facilities (Call the Animal Welfare Program for this information 57951)*
 - *Last HVAC data was collected 2018*
- *Describe illumination and mechanism of controlling light cycle. When was the last measurement taken? (AWP)*
 - *14:10 light cycle, controlled through use of timer-controlled light*
 - *2018 Last AAALAC visit*
- *Interior room surfaces shall be moisture-resistant, non-absorbent, impact resistant, and sanitizable.*

Housing

- *Describe animal housing (cage, pen, tank, etc.) size and material*
 - *Housing density will follow the SOP Zebrafish TriCities*
 - *What size tanks do you use? Tank sizes range from 2.5 gallon- 20 gallon tanks*
- *Describe environment enrichment that will be provided*
 - *EE will follow the SOP Zebrafish Tricities*
- *Describe if the animals will be housed socially or individually*
 - *Socially*

II. Sanitation Monitoring

- *Describe Sanitation Monitoring Program per SOP #5, if applicable. (Contact OCV at 509-335-6246 or pr.ocv.alert@wsu.edu to enroll in sanitation monitoring)*
 - *Tanks will be assessed once a year in the sanitation monitoring program*
 - *All tanks will be cleaned and disinfected as outlined in SOP Zebrafish TriCities*

III. Waste Disposal

- *Describe where carcasses will be disposed*
 - *Carcasses are stored in what freezer?*
 - *Freezer in BSEL 172 lab prep area*
 - *Then they are placed in local landfill*
- *Describe where soiled bedding or for aquatics where water will be disposed and how?*
 - *Waster water will go into the municipal water system*
- *Describe how hazardous waste is disposed if applicable*
 - *N/A*

IV. Animal Numbers and Tracking

- *List the person's name that will be tracking animals on My Research*
 - *Dr. Sweet will report animal numbers to the AWO after the class course is completed.*

V. Signage, Emergency Information (List of posted signs and locations)

- *Describe location of the following mandated signage and verify posting*
 - *Guidelines for Reporting Animal Concerns*
 - *Emergency contact information for Satellite Housing Location Personnel*
 - *Emergency contact for Veterinary assistance (OCV or other veterinarian)*
 - *Any biological, chemical, radiation or other hazard signage as required*
 - *Notification Protocol for Abnormal Animals*

VI. Security

- *Describe how the facility is secured (electronic key, standard key and number)*

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**Washington State University Standard of Veterinary Care for
Satellite Animal Housing Location**

41

VII. Disaster Plan

- See separate plan template below. Templates are available for all WSU locations

In the event of a power outage, how will the fish systems be handled? During electrical power outages and mechanical equipment failure PI will be contacted to monitor fish and set up any necessary backup requirements. In the case of an extended power outage, water oxygenation will be achieved through battery operated air stone or building airlines.

References

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**Washington State University-Pullman
Disaster Plan**

Animal Care

Elly Sweet Lab- WSU TriCities, Richland, Washington

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