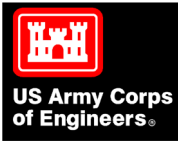


Montana Rapid Response Exercise Fort Peck Reservoir After Action Report

September 2021



Contents

Introduction	3
Why was this exercise notable?	3
Exercise Participants	4
Scenario.....	5
Exercise Agenda	5
Proposed Actions	6
Lead Agency Determination.....	6
Monitoring / Delineation of Affected Area.....	6
Containment	7
Treatment	7
Notifications and Communication	8
ESA Consultations and Considerations	8
Additional Considerations and Next Steps	9
Missouri River Basin Multi-Agency Coordination	9
Post Exercise Evaluation and Debrief	10
Appendix A Player’s Handbook.....	11
Appendix B Stakeholder Notification List	19
Appendix C Completed ICS Forms.....	20

Introduction

The 100th Meridian Initiative of the Missouri River Basin AIS Team conducted a dreissenid-based rapid response exercise on September 8-9, 2021 at Fort Peck Reservoir, Montana in partnership with Montana Fish, Wildlife & Parks (FWP). The exercise was intended to explore the roles and responsibilities of FWP the US Army Corps of Engineers (USACE), the U.S. Fish and Wildlife Service (U.S. FWS), local Conservation Districts, Fort Peck Tribes and all other Montana or regionally responsible entities if faced with a dreissenid discovery in Fort Peck.

The following objectives were identified to guide the exercise:

- The exercise team will demonstrate the ability to engage, prioritize, coordinate and complete emergency response activities.
- The exercise team will demonstrate an ability to conduct and disseminate information of the detection, response and conclusion of a Dreissenid Emergency.
- The exercise team will demonstrate ability to respond to a Dreissenid Emergency and explore the utilization of an emergency resources, as identified during the exercise.
- Utilize the *Columbia River Basin Dreissenid Mussel Rapid Response Plan* (crbdirt.com) [elements](#) and the *Columbia River Basin ESA Manual for Rapid Response* in the exercise process and provide feedback on their functionality for Missouri River Basin applicability.

The two-day event was held in-person at the Fort Peck Interpretive Center and multiple participants joined remotely using GoToMeeting software because of the COVID-19 pandemic. This exercise was part of the efforts by the 100th Meridian Initiative Missouri River Basin (MRB) Team and was the first dreissenid exercise staged in the Missouri Basin.

Why was this exercise notable?

The 100th Meridian Initiative of the Colombia River Basin has conducted over 10 exercises over that past decade. While the 10th Meridian Initiative of the MRB has existed for a similar time period, conducting an exercise of this nature was the first for these partners. Additionally, the MRB AIS Team does not have a guiding rapid response plan for the basin with signatories. During the exercise, a MRB Multi-Agency Coordination (MAC) group was initiated to help drive increased awareness on dreissenid rapid response, to encourage learning among MAC participants and illustrate future communication structure in actual response needs.

It is also notable that this exercise was successfully completed at a time when COVID-19 has negatively affected productive simulations and work functions. Combining in-person and remote access allowed for a full complement of participants in the exercise. Finally, the exercise was able to incorporate a discussion with U.S. Fish and Wildlife Service's Ecological Service staff to allow for greater understanding on possible impacts to ESA-listed species based on exercise responses taken.

Exercise Participants

Montana Fish Wildlife & Parks	Tom Woolf Steve Dalbey Marc Kloker Wade Garaets Craig McLane Stacy Schmidt Jayden Duckworth Zach Crete Jessi Gudgel Liz Lodeman Russ Hartzell John O'Bannon Andrew Rivers Austin Jaynes Sean Flynn	US Army Corps of Engineers	Patricia Gilbert Clayton Ridenour Scott Sterling Zach Montreuil Jason Colbert Ryan Larsen
U.S. Fish and Wildlife Service	Joanne Grady Paula Gouse Austin McCullough Deb Goeb Jackie Wichman Brian Hamm Kim Chadwick Josh Homer	McCone Conservation District Garfield Conservation District Pacific States Marine Fisheries Commission South Dakota Fish and Game North Dakota Fish and Game Creative Resource Strategies	Diane Black Dusty Olson Stephen Phillips Tanner Davis Ben Holen and Grant Kapaun Lisa DeBruyckere
Facilitator	Leah Elwell with Invasive Species Action Network		

Scenario

A Fort Peck Rapid Response Players Handbook (Appendix A) was developed and provided to all exercise participants prior to the exercise. This document outlined the objectives of the exercise, roles of participants, guidelines, assumptions and details about the site. The planning team determined that a response to a dreissenid mussel veliger detection in Duck Creek access area on Fort Peck Reservoir on July 15, 2021 would be the scenario. Fort Peck Reservoir is in Northeastern Montana and is within the Missouri River Basin. The reservoir created by this Fort Peck Dam, Fort Peck Lake, is the fifth largest man-made lake in the US. The U.S. Army Corps of Engineers operates the Fort Peck Project.

There are many unique species in the area including Endangered Species Act-listed pallid sturgeon (*Scaphirhynchus albus*), and piping plover (*Charadrius melodus*).



Figure 1. Exercise participants visiting Duck Creek Access Site.

Exercise Agenda

The agenda for the exercise is found in Appendix A and included the following:

- A review of the scenario, including maps and logistics of the site.
- A discussion of potential monitoring and containment strategies.
- A site visit to Duck Creek Access (scenario location) to better understand response logistics and possible response variables.
- U.S. FWS diver demonstration and survey.
- Preparations needed to consult with the U.S. FWS, including a presentation that assisting identifying listed species and critical habitats that have the potential to be affected by a

response action, articulation of potential response options, and best management practices to be implemented that minimize detrimental effects to listed species and critical habitats

- Discussion with two experts skilled at chemical application on dreissenid mussels control/eradicate to understand application methods, rates and expenses.
- Compilation of information relative to chemicals, permits and licenses needed, physical barriers, other equipment (e.g., boats, signage), and alteration of water management potential.
- Development of contact list for notification.
- A discussion with U.S. FWS Ecological Services staff to practice an Emergency Consultation notification.
- An exercise de-brief to share lessons learned.

Proposed Actions

Multiple actions were discussed to address the veliger discovery. Full group discussions and break-out groups utilizing Incident Command System forms (www.crbdirty.com) outlined the following actions. Additional details are captured in Appendix B.

Lead Agency Determination

FWP would be the lead in response planning and actions. However, the USACE would have responsibilities on boat ramp closures, unless managed by FWP or BLM. USACE would provide guidance on monitoring and contribute a turbidity curtain for in-water treatments.

Monitoring / Delineation of Affected Area



Figure 2. FWP Stacy Schmidt demonstrating a plankton tow for collection of veligers.

A full monitoring response would be launched to determine if there were any veligers or adult dreissenids elsewhere in the reservoir. Utilization of mussel-sniffing dogs via contracted services, divers with assistance from U.S. Fish and Wildlife Service and shoreline surveys with assistance from McCone and Garfield Conservation Districts would be initiated.

A lab to process samples could be temporarily set up at the fish hatchery. Awareness of staff burn-out would be a priority. The initial round of sampling would help guide and focus additional sampling locations. The dam itself would be examined for the presence of dreissenids, including spillway dives, and inspection of gates. The intake could be examined with the assistance of remotely operated vehicles (ROVs).

The U.S. FWS Region 6 Dive team was on-site to retrieve actual settling plates and conduct routine monitoring for dreissenids during the exercise. All

exercise materials were shared with dive team participants and a dive log, photos and settling plates were shared with the exercise participants to understand operationally how a dive team can assist with monitoring and delineating a population of dreissenids.

Containment

A temporary emergency closure of Duck Creek would be initiated to conduct a treatment of the area for a maximum of 120 days. Likely a closure could be accomplished within FWP in 24 hours to allow Director's Office and legal staff to finalize. Under Title 36, the USACE has ability to post closures. A full watercraft inspection staff (plus 20 employees from Garfield County temporarily) could deploy in 24 hours to conduct Clean, Drain, Dry inspections with all boaters. FWP has 40 mobile decontamination units to bring on-site. To achieve resource efficiency, the major roadways would be a focus to capture boater traffic. In the long-term, a possible check-in/check-out system could be initiated for boaters.

The nearby Fort Peck State Fish Hatchery utilizes water directly from the reservoir. While the water has a physical filtration system in place, a gravity-fed ground water system would improve security of the hatchery operations. If hatchery operation grow ponds are affected by dreissenids, these fish will not be permitted to be stocked at regional waterbodies, such as Nelson, Fresno, Wadsworth or Frances reservoirs. Smaller sized stock could be used to mitigate this situation.

Treatment



Figure 3. The Dive Team preparing to launch in Duck Creek bay.

The area of Duck Creek bay is approximately 49 acres and an average of 15 feet deep. Wind plays an important role in the Duck Creek bay, with the prevailing winds drive into the shore. An environmental assessment (EA) will be needed to make any chemical applications and can be vetted within 1 weeks' time. There would be no salvaging of species present in the treatment area to prevent any spread of dreissenids. Further if monitoring indicated that there was no evidence or veligers elsewhere, then a targeted chemical treatment would be prioritized. Concurrent dye studies would be conducted with bioassays to ensure treatment application rates and conditions were on target.

Discussion on potash application led by Dan Butts. This chemical is not labeled for use in dreissenid control, but rather is labeled for agricultural use. Consequently, it could be sourced locally. The target application would be 100 ppm coupled with the use of silt barriers. Stationary tanks would be placed on shore and the chemical would be applied with a ballasted hose. Roughly 5-10 days are needed to apply the chemical at the specified rate, and in

7-10 days dreissenids would be dead. Potash does not affect fish or daphnia, but it is toxic to organisms

with a shell. The approximate cost for the specified areas would be \$365,000 for the chemical, application and monitoring.

Discussion on EarthTec QZ application (a copper based product) with David Hammond. This chemical is labeled for use in dreissenid control. Further information would be needed to understand possible impacts to sturgeon. The approximate cost for the specified area would be \$75,000 and a maximum of 30 days would be needed for application. This chemical is preferred due to the cost and effectiveness.

Closure of Duck Creek for chemical application would increase traffic to the nearby marina. If needed the USACE could install a temporary boat launch to help disperse boat traffic.

Consideration for manipulating reservoir water levels as a treatment method was discussed. However, because the Missouri River is managed as a system of reservoirs with downstream navigation, the other 5 downstream dams would also have to be manipulated to account for the deviation in water level at Fort Peck, and would likely have significant long term impacts to the authorized purposes the USASCE is Congressionally directed to manage on the Missouri River. Therefore, drawdown to promote winter kill was not further considered as a treatment option on Fort Peck Lake.

Notifications and Communication

Internal notifications among primary players: USACE – Omaha Commander. U.S. FWS - Regional Director, FWP – Director and Governor.

Regional notifications: FWP has a completed rapid response plan where regional players have been identified for notification on status of the waterbody. These include downstream agency management partners (e.g. North Dakota Game and Fish) and local managing entities (e.g. irrigation districts). A press conference and multiple public meetings would be primary steps to communicate with multiple stakeholders. Launching a specific web page would assist in addressing FAQ's and providing current information. A timeline of activities, and an active GIS map could be included online. USACE would double FWP communication efforts and assist with educational components.

Public partners: In general, gaining public support for any actions being taken would be a priority. Explaining what is being done and why will be critical. Messages will be delivered with radio, TV, newspaper and social media. FWP is on-boarding an app, X MT, that will be highly useful in making public notifications on status of the waterbody, treatments and impacts to recreation. Multiple signs will be needed to mark closures and explain treatment restrictions.

ESA Consultations and Considerations

ESA Consultation preparation discussion was led by Lisa DeBruyckere. The process of ESA consultation requires the responsible agency to show due diligence in executing control actions and prevent threats to ESA-listed species, as well as convey all Best Management Practices that were initiated during treatment. A polygon is used to define the footprint of the action area and potentially affected areas. In the initial phase of dreissenid delineation, the polygon may be large, as more information is gathered over time a polygon will likely become more concise. BMPs on this response will include minimizing turbidity, including on-site monitoring during treatment to observe for any impacts to nesting raptors, migrating plovers or minimizing disturbance to cultural resources.

A cultural review would be needed. Under Section 106, a programmatic agreement with Fort Peck Tribes, including a 30-day comment period, would be required. All ground disturbance would be kept to

a minimum and on-the-ground treatment set up would fall within the pool fill width within the USACE Master Agreement. Any water level changes would be not considered. There are many challenges to make water level changes namely affecting downstream navigation and state needs.

During the exercise consultation discussion, U.S. FWS Ecological Services Austin McCollough stressed to address the emergency first. However, there were suggestions to scan for any telemetered sturgeon and remove from the area and monitor the water adjacent to the treatment zone for any failure etc.

Additional Considerations and Next Steps

A group discussion allowed all participants to voice actionable items post-exercise and ideas to increase preparedness.

- Examine other realistic scenarios on Ft Peck
- The completion of pending HACCP plan to assist the hatchery in protecting resources
- Greater examination of communication needs for this scale of a response
- Test internal communication
- Create a Fort Peck Rapid Response Plan
- Procure additional supplied (e.g. ethanol for monitoring, silt barriers for control treatment)
- Clarify where resources can be secured from
- Refine operations
- Instill flexibility in watercraft inspection staff if called to an incident
- Development of cost estimate for operations at an infested Fort Peck
- Development of response plans for South Dakota
- Development of response plans for North Dakota and Lake Sakakawea
- Understand what USACE staff can be utilized where (district vs. field support staff)
- Conduct habitat suitability studies on other USACE projects
- Discussions with local tribes on actions
- Conduct a Programmatic Environmental Assessment for treatment on Fort Peck
- Develop a plan for setting up a remote lab
- Determine level of support internal to agencies for various actions
- Understand chemical treatment impacts to sturgeon
- Explore how Water Resource Development Act funds could be used to secure resources for response
- Identify methods to support deploying skilled U.S. FWS dive team for future monitoring
- Evaluate the functionality of the new FWP licensing system (XMT) to facilitate a check-in / check-out function to facilitate watercraft inspections at mussel positive waterbodies.

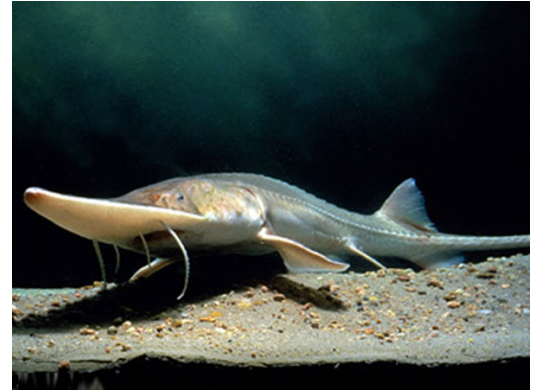


Figure 4. Pallid sturgeon is present in Fort Peck and an ESA listed species. Photo by U.S. FWS.

Missouri River Basin Multi-Agency Coordination

At the close of the exercise a brief conference call was held with the Missouri River Basin Multi-Agency Coordination (MAC) group. In this case the MAC included invitations to participate to leadership from

Montana, North Dakota, South Dakota, Nebraska, Iowa, Kansas, Missouri, Minnesota, regional U.S. Fish and Wildlife Service, regional USACE and the Department of Interior. The lead agency (FWP) provided a briefing of the situation and an outline of the proposed actions to the MAC.

Post Exercise Evaluation and Debrief

At the close of the exercise, the participants were asked to provide feedback on the event and the process.

What worked well?

Facilitation of the event went smoothly. The participation/engagement from all was very successful. Collaboration between agencies was evident. The break-out working groups addressing/using the ICS materials were a highlight. The site visit improved comprehension of the scope of the issue. The inclusion of the Dakota states improved the discussion.

What needs improvement?

Better technology to improve virtual participation. Spending more time on fine tuning the response details (in terms of funding and personnel). A more realistic scenario for a large reservoir would have been helpful. Determining the exact position or person who would be responsible for specific actions should be identified.

What was missing or should have been covered in advance of the exercise?

The participants largely felt prepared. Some felt that they wanted more information of what was expected of them prior to. Perhaps adding more time to look at other potentially affected infrastructure. Some additional information on the presentations could be shared in advance. Understanding what support already exists for specific actions within agencies.

What should be done differently?

An evening social to promote relationship building would have been good. Spend time on a broader spectrum of scenarios which could have increased participation. Increasing stakeholder involvement. Assigning an individual assignment for each participant. Clearly lining out roles for each participant.

Are there other issues that should be tackled on behalf of the stakeholders?

Available funding and a communication strategy. Continue open communication to avoid patchy relationships. Improvement for tribal participation.

Appendix A Player's Handbook

Fort Peck Rapid Response Players Handbook

September 2021



Purpose and Scope

The goal of this exercise is to improve regional understanding of the roles and responsibilities of the primary managing entities of Fort Peck Reservoir, Montana in the event of a dreissenid discovery. By broadening partner participation in dreissenid management an improved response and preparation for actual response in eastern Montana waters is possible.

The participating entities include Montana Fish, Wildlife & Parks (FWP), US Army Corps of Engineers (USACE), the U.S. Fish and Wildlife Service (U.S. FWS), Garfield and McCone Conservation Districts, and multiple tribes. The scenario describes a situation where downstream management within the Missouri River Basin system could be affected.

Objectives

- The exercise team will demonstrate the ability to engage, prioritize, coordinate and complete emergency response activities.
- The exercise team will demonstrate an ability to conduct and disseminate information of the detection, response and conclusion of a Dreissenid Emergency.
- The exercise team will demonstrate ability to respond to a Dreissenid Emergency and explore the utilization of an emergency resources, as identified during the exercise.
- Utilize the *Columbia River Basin Dreissenid Mussel Rapid Response Plan* (crbdirt.com) [elements](#) and the *Columbia River Basin ESA Manual for Rapid Response* in the exercise process and provide feedback on their functionality for Missouri River Basin applicability.

Guidelines and Event Assumptions for Participants

This is an exercise. If you make contact outside of the exercise participants you should preface all communication with “This is an exercise, not an actual incident”. This ensures that individuals not participating in the exercise understand that the events are not occurring.

Participants in the exercise will respond to the situation as presented utilizing their expert knowledge, current response plans, and familiarity from relevant training.

Problem-solving will be the primary focus of the exercise. Decisions made during the exercise should be viewed as an opportunity to discuss and explore multiple options and possible solutions.

Montana Fish, Wildlife & Parks utilizes the following guidelines in their sampling regime to help guide management decisions from monitoring results. This terminology will be utilized throughout this response which is specific to dreissenid monitoring.

Waterbody definitions¹:

- Status Unknown – Waters that have not been monitored.
- Undetected/Negative - sampling/testing is ongoing and nothing has been detected, or nothing has been detected within the time frames for de-listing.
- Inconclusive (temporary status) - Waterbody has not met the minimum criteria for detection.

¹ Definitions were developed by the Western Regional Panel in ANS, Building Consensus in the West Committee

- Suspect – Waterbody that has met the minimum criteria for detection.
- Positive – Multiple (2 or more) subsequent sampling events that meet the minimum criteria for detection.

Scenario

A routine water sample to monitor for veliger mussels was taken by USACE on July 15 from Fork Peck's Duck Creek Recreation Area. The samples were processed by Montana Fish Wildlife & Parks Veliger Laboratory within 2 weeks and dreissenid veligers were identified. A molecular confirmation was also conducted. The results are disseminated to the appropriate agency staff. Internal notifications within both the state of Montana and the USACE are completed. Immediately after the positive results are confirmed, rapid evaluation of a possible distribution of a population of mussels is made by FWP with multiple samples taken within the area of the positive sample, and both up and down lake from the area.

On August 2, a team of state, federal, tribal and local partners is assembled at Fort Peck, MT to determine the next steps in containment, further prevention and possible eradication of a delineated population of mussels. A U.S. FWS dive team is assembled to help visualize a detailed situation of the possible population.

Strategies to eradicate dreissenids are weighed by a collaborative team to consider potential impacts to resident Endangered Species Act listed species pallid sturgeon. An ESA Consultation is initiated with the nexus agency, U.S. Fish and Wildlife Service. Possible eradication methods to explore the feasibility and impacts of potash and copper treatments on ecological, archeological and cultural resources will be examined.

Briefings are to be conducted with leadership from USACE Omaha, U.S. Fish and Wildlife Service, FWP, North and South Dakota (Governor's office, Fish and Game Administrators) and additional Missouri Basin State leaders as identified, and local tribal leadership.

A Missouri River Multi-Agency Committee may be explored as a mechanism to disseminate information to Missouri River Basin management agencies who may be impacted and may also play a role in assisting the situation.

The Public Information Officers from FWP Region 6, USACE, and U.S. FWS will be engaged in the event briefing and develop a joint press release for distribution in real-time.



Description of Scenario Location and Exercise Dynamics

Fort Peck Reservoir is within the Missouri River Basin. The Fort Peck Dam which is 21,026 feet in length and over 250 feet in height, is the largest hydraulically filled dam in the United States. The reservoir created by this dam, Fort Peck Lake, is 134 miles long, has a 1520-mile shoreline. It is the fifth largest man-made lake in the US. The U.S. Army Corps of Engineers operates the Fort Peck Project.

Recreation: There are 19 recreation areas associated with Fort Peck Reservoir and number of developed and remote boating access points, including Duck Creek Recreation Area. Multiple concessionaries operate at the several developed marina points on the lake. Access is available year round.

Biology and ecology: Fisheries species include walleye, northern pike, paddlefish, sauger, lake trout, small mouth bass, cisco and chinook salmon. Pallid sturgeon is a rare species present in the Missouri River Basin. The pallid sturgeon has been on the Endangered Species List since 1990. Eurasian watermilfoil is present in Fort Peck and multiple control measures have been applied.

Other dynamics: The Fort Peck Multi-Species Fish Hatchery is owned by the Army Corps of Engineers but is staffed and operated by Montana Fish, Wildlife and Parks. Opened in the spring of 2006 this facility is capable of rearing a wide variety of warm and cool water fish including walleye, northern pike, Chinook salmon, and rainbow trout. The facility has 64 rearing tanks and incubation capacity for up to 125 million walleye eggs, 500,000 Chinook salmon eggs and 350,000 rainbow trout eggs. Forty outdoor ponds are used in the spring and summer for raising fingerling warm water fish that are distributed to Fort Peck Reservoir and other eastern Montana waters. Hatchery operations are connected to Fort Peck and Missouri River waters.

Regional management entities: Region 6 FWP, USACE, U.S. FWS CM Russell National Wildlife Refuge, Garfield and McCone County Conservation Districts and Tribal representation of Fort Peck Tribe.

Agenda

Day 1		
	Activity	Lead
8:00 am	Welcome and Introductions	Tom Woolf, Stephen Phillips and Clayton Ridenour
8:10 – 9:10 am	Review Scenario and discussion actions to date. Containment/Closure Discussion Delineation/Additional Monitoring	FWP // USACE // U.S. FWS
9:10 – 9:45 am	Roundtable discussion on all actions to date	All participants
9:45 – 11:00 am	Field trip to the site Containment and WID Briefing On-site Dive Team Deployment	Patricia Gilbert Steve Dalby
11:30 – 12:00 pm	Evaluation of Possible Treatment Options 1&2	All participants
12:00 – 1:00 pm	Working Lunch	On site – to be provided
1:00 – 2:00 pm	Discussion on <ul style="list-style-type: none"> • hatchery impacts • downstream impacts and responses 	Jay Privachek, FWP Hatchery Manager
2:00 – 3:00 pm	Consult with treatment experts // agencies	Phone calls to Potash Company, EarthTech, and others
3:00 – 4:00 pm	Recap on all decisions, recommendations and next steps.	Leah Elwell
4:00 – 4:30 pm	PIO Briefing	All participants
4:30 – 5:00 pm	Dive Team Debrief	Deb Goeb

Day 2		
	Activity	Lead
8:00 – 9:00 am	Prep for ESA Consultation <ul style="list-style-type: none"> • Biological, Cultural and Archeological Resource Evaluation Prep for leadership calls	Lisa DeBruyckere Leah Elwell All participants
9:00 – 9:15 am	Debrief Leadership Call to Internal Agencies	Tom Woolf Clayton Ridenour Joanne Grady
9:15 – 9:45 am	Briefing to PIOs check in	Lead PIO
9:45 – 11:45 am	Preparation of Incident ICS Documentation Break Out	Leah Elwell All participants
12:00 – 1:00 pm	Working Lunch	On site – to be provided

1:00 – 2:00 pm	ESA Consultation	Austin McCollough and participants
2:00 – 2:30 pm	Review all final recommendations/actions	Leah Elwell
2:30 – 3:00 pm	Missouri River Basin Multi-Agency Coordination (MAC) Partner Briefing Call	Stephen Phillips Tom Woolf Clayton Ridenour
3:00 – 3:30 pm	Participant Evaluation and Next Steps	Stephen Phillips Leah Elwell

Resources

crbdirt.com for dreissenid specific ICS resources and forms

fieldguide.mt.gov for species status

Appendix B Stakeholder Notification List

Communication Notification List

Federal

- USACE
- U.S. FWS
- Bureau of Land Management

State

- Governor's office
- Department of Environmental Quality
- FWP
- Department of Natural Resources and Conservation
- North and South Dakota Fish and Game Agencies

Tribe

- Fort Peck Tribe
- Little Shell Tribe

Private / Local

- Mayor (Ft. Peck and Glasgow)
- Water User groups
- County Commissioners (Garfield, McCone, Valley)
- County Conservation Districts (Garfield, McCone, Valley)
- Irrigation Districts
- Legislators
- Chamber of Commerce (Glasgow, Malta, Wolf Point, Jordan)
- CMR refuge working group

Businesses

- Marinas
- Lakeridge D+G
- Guides and Outfitters

Appendix C Completed ICS Forms

INCIDENT ACTION CRITICAL ANALYSIS (CRB IMS Form C)

1. Incident Name: Fort Peck Mussel detection	2. Operational Period (Date/Time) From: 9/9 To:	3. Location: Duck Creek BR
4. Planning and Operations Team: <input type="checkbox"/> Response <input checked="" type="checkbox"/> Monitoring <input type="checkbox"/> Containment <input type="checkbox"/> Other:		
5. Objective(s) (optional: additional forms may be completed for each objective): <ul style="list-style-type: none"> - Population delineation @ site 1st, then beyond long term - Adult + veliger sampling - set up lab on site - @ hatchery w/ stall + expected turnaround time 1 day - 2 - deploy teams w/ assignments <ul style="list-style-type: none"> - continued efforts planning - Data management + reporting - monitoring decon station - gear/equipment + all teams - volunteer coordination 		
6. Priorities: <ul style="list-style-type: none"> find the mussels w/ the most evidence - where are they, where aren't they (probably) - Safety - prevent cross contamination - contingency planning (tires/fuel) - logistics 		
7. Limitations and Constraints: Resources - boats, trained staff (lab + field). <ul style="list-style-type: none"> turnaround time for lab staff fatigue / burnout weather preventing boat crews mail (samples) - helicopters? 		
8. Leadership Messaging (safety, key actions, direction, etc.): <div style="text-align: right; margin-top: 20px;">See form D1 for Incident Safety Hazards</div>		
9. Prepared by: (Operations and Planning Lead)		10. Date/Time:
CRB IMS Form C, Page ___ of ___		adapted from FEMA ICS-202

INCIDENT ACTION CRITICAL ANALYSIS (CRB IMS Form C)

1. Incident Name: Containment	2. Operational Period (Date/Time) From: _____ To: _____	3. Location: _____
4. Planning and Operations Team: <input type="checkbox"/> Response <input type="checkbox"/> Monitoring <input type="checkbox"/> Containment <input type="checkbox"/> Other:		
5. Objective(s) (optional: additional forms may be completed for each objective): <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>✓ Containment Duck Creek</p> <p>✓ Outreach - exam in boats - be dry -</p> <p>✓ Regs - no bait or fish transport - water</p> <p>Politics ???</p> <p>✓ Certified boater update → fast</p> <p>check in & check out</p> <p>volunteers CD's</p> <p>Staff redeployed - camping</p> <p>Info booth</p> </div> <div style="width: 45%;"> <p>* CWO staff help</p> <p>* Regional help</p> <p>* Hatchery help</p> <p>boats traffic</p> <p><u>hrs & dates</u></p> <p>Flyers on vehicles for check before you leave</p> <p>LE roll!!! outreach</p> </div> </div>		
6. Priorities: <p><u>Drumlines</u> ⇒ Over due to start? then back off as necessary</p> <p>* Outreach below dam? Containment Area Whole Res</p> <p>Nialta? 2</p> <p> Hwy 200 & 191?</p> <p style="margin-left: 150px;">Signage</p> <p style="margin-left: 150px;">FP to FP ⇒ OK</p> <p style="margin-left: 150px;">Seals?</p> <p style="margin-left: 150px;">How to Use</p>		
7. Limitations and Constraints: <ul style="list-style-type: none"> - Scope - housing - burn out - food - biological risk - least amount of information for people to do 		
8. Leadership Messaging (safety, key actions, direction, etc.): 		
9. Prepared by: (Operations and Planning Lead)		See form D1 for Incident Safety Hazards
10. Date/Time:		

INCIDENT ACTION CRITICAL ANALYSIS (CRB IMS Form C)

1. Incident Name: Duck Cr.	2. Operational Period (Date/Time) From: To:	3. Location:
4. Planning and Operations Team: <input type="checkbox"/> Response <input type="checkbox"/> Monitoring <input type="checkbox"/> Containment <input type="checkbox"/> Other:		
5. Objective(s) (optional: additional forms may be completed for each objective): <div style="text-align: center; font-size: 1.2em;"> Eradicate drissenid veligers using Earthtec @ a concentration of 1ppm as per label guidelines. </div>		
6. Priorities: <ul style="list-style-type: none"> - Determine ^{site} closure details - Accurately determine volume of water to be treated <ul style="list-style-type: none"> • Rough est = 368 acre-feet • Calculate amt of Chemical required to achieve 1ppm (→ 2000) • " " cost of (= \$145,000) @ - Determine treatment period - " " logistics of treatment (staff, watercraft, application equip) - Determine sentinel species (if available) 		
7. Limitations and Constraints: <ul style="list-style-type: none"> - Availability & delivery time of chemical - Legal challenge of application - Buy-in / support of key constituents - EA prior to treatment? 		
8. Leadership Messaging (safety, key actions, direction, etc.): <ul style="list-style-type: none"> - ID key constituents (AOCB, cabin owners, irrigators, anglers) - Message importance of treatment - <div style="text-align: right; font-size: 0.8em; margin-top: 10px;">See form D1 for Incident Safety Hazards</div>		
9. Prepared by: (Operations and Planning Lead)	10. Date/Time:	
CRB IMS Form C, Page ___ of ___		adapted from FEMA ICS-202

Inspectors — 30 (pull CD support volunteers, CWD) ^{go own & back off}

Contain Duck Creek, North side and dry arm of reservoir

Exit inspections at top 5 ramps in the area

- 2 inspectors per station

- Work with monitoring for other detections / boat traffic

Establish consistent educational materials through all private business/agencies

- simple

- authority and responsibility through messaging

Work with regulations to stop transport of fish

Work on Certified boater program

- stickers

- possible check in/out

Seals as a possible inspection system

Role of law enforcement

Long term containment with inspection stations at pinch points

- Hwy 2, 200, 191

Role of R7 and R6

Start operations high and be flexible down the line

- Utilize on call # for containment calls? ^{management team/inspectors} ~~How much traffic~~

- FP website ~~info~~

Explore MT →

Thinking outside of Box but not out of Polygon.

INCIDENT ACTION CRITICAL ANALYSIS (CRB IMS Form C)

am that would be needed set up for Hatchery itself
Possible use of USFWS - CMR Bunkhouse

1. Incident Name:		2. Operational Period (Date/Time) From: To:		3. Location: FP Hatchery	
4. Planning and Operations Team: <input type="checkbox"/> Response <input type="checkbox"/> Monitoring <input type="checkbox"/> Containment <input checked="" type="checkbox"/> Other: OFF-Site Staging					
5. Objective(s) (optional: additional forms may be completed for each objective): 1. Hatchery Lab - use - Containment + Isolation to preform Samples for analysis 2. Room + Booth for individuals processing + shipping Samples ^{x maybe extra room} 3. Protocols set up for building use + areas of use only for Contaminated Samples. (Building Map of use) 4. FP Hatchery use areas / at non-staff (Hatchery) areas of use. _{or help USFWS} 5. Possible Incident Command area in Cont Room (off site)					
6. Priorities: 1. Hatchery Safety + Isolation 2. Non-Contamination of Hatchery 3. Hatchery Use Rules / obligations:?? 4. Locking / blocking Door to Hatchery floor - at					
7. Limitations and Constraints: 1. Contamination of Hatchery - How to limit Access to main Hatchery. 2. Areas of use + Isolation for Sample processing. (Lab, Dorms, lounge, Cont Room + kitchen) 3. what else needs to be in place in lab for ease of use. 4. No - Wiki - but do have State Network Possible can ✓ to see it at WiFi could be set up					
8. Leadership Messaging (safety, key actions, direction, etc.): 1. Hatchery Safety / use 2. Prepping Lab for use for Incident					
See form D1 for Incident Safety Hazards					
9. Prepared by: (Operations and Planning Lead) WADE T. GERAETS FP Hatchery Manager				10. Date/Time:	

OPERATIONAL PLANNING WORKSHEET (CRB IMS Form D)

1. Incident Name:		2. Date:		3. Planning and Operations Team:			
4. Team, Group, or Other designation	5. Work Assignment & Special Instructions	6. Resources					

**U.S. FISH AND WILDLIFE SERVICE
FIELD CREW EMERGENCY PLAN AND PRE-DIVE BRIEFING**

Office Name: Fort Peck AIS Dive

Project Title: Fort Peck AIS Dive Dates of Mission: 09/07/2021-09/09/2021

Methods of Travel: GOV to Fort Peck; GOV Boat to Dive Site

Project Location (attach map, chart, etc.): See Attached. Fort Peck Lake Marinas and Boat Ramps

Dive Team Members (*Leader)/ (**Conditional Diver)	FWS Authorization Date	Emergency Contact Name	Emergency Contact Phone
Deborah Goeb	6/2021	Matt deRosier	406-366-2036
Jackie Wichman	6/2021	Jared Wichman	406-350-2965
Kim Chadwick	6/2021	Barbara Chadwick	308-778-6093
** Brian Ham		Echo Ham	406-212-1414

** Conditional Divers must be accompanied by a Service certified Diver.

**Josh Homer

Hillary Homer

360-580-0655

Mission Description (methods, depths, conditions, etc.):

Inspect Aquatic Invasive Mussel Monitoring substrates in Marina's/boatramps of the Fort Peck Lake. Depths will range from 15 to no more than 40 feet. Conditions/locations will vary dependent upon weather and wind conditions. May enter by boat or from shore. Will follow bouy line down to site. Water temp will range from 45 to 75 degrees F. Ascents will be at a rate no faster than 30 to 60 feet per minute (6 inches per second), Fort Peck Lake Altitude 2250ft. Outside temperature to range from 75-100 degrees F. Surface tender will remain in boat directing boat traffic away from divers. Dive flag flown by boat or towed by divers. JHA's for diving can be found on the USGS Specialized Safety Intranet Web Site for Diving. Divers will be in dry suits/wet suits with full face mask and comms. Potential for less than 1ft visibility. Entanglement potential low- divers will be equipped with cutting devices. Overhead obstruction "i.e. marina docks and moored boats". Per CDC guidelines all Covid related safety measures will be followed during all dive operational periods. See Covid-19 Phased Recovery Operations Documentation approved by the Regional office.

Dive Safety Plan (title and date): Dive Safety Plan for Region 6, March 2, 2015

Field Safety Gear Checklist: First Aid Kit Oxygen Kit Tool Kit (As Needed)
Radio (frequency) _____ Phone (No.) 406-788-6090/406-366-0333/406-366-0904

Emergency Evacuation Plan:

Frances Mahon Deaconess Hospital located in Glasgow, MT- Transport would be arranged by EMS; Dive Team will function as one unit and will have surface tender; Emergency diver recall will consist of 3 metal on metal strikes/Shay Piedalue 406-366-0904/Deb Goeb 406-366-0333/Jackie Wichman 406-788-6090. Location given to EMS by location name and GPS point.

Important Phone Numbers:

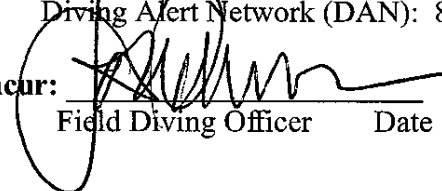
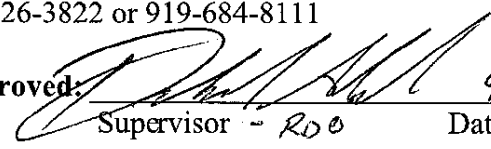
Emergency Medical Services: 911

Recompression Chamber: Portneuf Wound Care and Hyperbaric Center 208-239-2670/Salt Lake City LDS Hospital 801-408-6410 (for emergent care)

Diving Physician: Dr. Willis Parmley, 208-239-2670 Dr. Lindell Weaver 801-408-3623 for emergent care

U.S. Coast Guard: N/A

Diving Alert Network (DAN): 800-326-3822 or 919-684-8111

Concur:  Approved:  9-8-21
Field Diving Officer Date Supervisor - ROO Date

**Denotes Conditional Diver