

**Federal Agency Resources Available to Share During Mussels Rapid Response in Western Waters \*as appropriate and pending availability, as of January 2022**

This list was developed to advance the Federal interagency Memorandum of Understanding to support rapid response actions for invasive zebra and quagga mussels in western waters of the United States by identifying Federal resources that could be shared to strengthen rapid response actions. The list will be reviewed and updated annually as needed. If you have questions about this list, please contact Hilary Smith, Senior Advisor for Invasive Species, U.S. Department of the Interior, hilary\_smith@ios.doi.gov.

Agency	Resources that may be Available	Resource Description, including any conditions or limitations	Is the Resource limited to a specific geography?	Contact Responsible for Coordinating Resource Deployment					
				First Name	Last Name	Title	Address	Email	Phone
BIA	Funding	BIA can provide funding to Tribes and Tribal organizations for rapid response.	Funding must benefit Tribal resources	David	Wooten	Chief, Branch of Fisheries, Wildlife, and Recreation	1001 Indian School Road, NW, Suite 343-B Albuquerque, NM 87104	david.wooten@bia.gov	505-563-3128
BLM	Funding	BLM can provide funding to support state efforts for containmant on the Lower Colorado River.	AZ, CA, and southern NV in the Lower Colorado River Corridor	Elroy	Masters	Fish and Wildlife Program Lead	One North Central Ave, Suite 800, Phoenix AZ 85004	emasters@blm.gov	602-417-9346
BLM	Decontamination Unit	BLM -AZ Lake Havasu Field Office has a mobile decon unit and team to support efforts on the Lower Colorado River.	AZ, CA, and Southern NV in the Lower Colorado River Corridor	Elroy	Masters	Fish and Wildlife Program Lead	One North Central Ave, Suite 800, Phoenix AZ 85004	emasters@blm.gov	602-417-9346
NPS	Boats	NPS units with boatable waters, including western units with quagga / zebra management programs, have boats. Number, type, size capacity vary from park to park. Park boats would be available to reponse actions within park waters. Availability outside park boundaries would be subject to request and Superintendent approval.	Nationwide	John	Wullschleger	NPS Fish / Aquatic Invasive Species Lead	1201 Oakridge Drive, Suite 250 Fort Collins, CO 80525	john_wullschleger@nps.gov	970-225-3572
NPS	Staff time / manpower	NPS Fish / Aquatic Invasive Species lead available for coordination of rapid response activities. Regional points of contact may be available as needed for response within their region. Park staff available for rapid response in park waters. Availability outside of park boundaries subject to request and superintendent approval.	Nationwide	John	Wullschleger	NPS Fish / Aquatic Invasive Species Lead	1202 Oakridge Drive, Suite 250 Fort Collins, CO 80525	john_wullschleger@nps.gov	970-225-3572
NPS	Decontamination Units	Parks with quagga / zebra mussel management programs have decontamination units. Number, type, and capability is variable. This equipment would be available for rapid response actions within a park. Availability for activities outside parks boundaries would be subject to request and superintendent approval.	Western Parks with quagga / zebra mussel management programs	John	Wullschleger	NPS Fish / Aquatic Invasive Species Lead	1203 Oakridge Drive, Suite 250 Fort Collins, CO 80525	john_wullschleger@nps.gov	970-225-3572
NPS	Divers / Dive Teams	NPS has a national dive program with a focus on submerged cultural resources. A number parks also maintain dive programs which often focus on specific issues, resources or tasks (e.g., cultural / biological surveys, search and rescue). Divers would likely be available for rapid response actions within park waters. Availability outside of NPS areas or for work not within their scope of duties would be subject to request and supervisor approval.	Nationwide	John	Wullschleger	NPS Fish / Aquatic Invasive Species Lead	1204 Oakridge Drive, Suite 250 Fort Collins, CO 80525	john_wullschleger@nps.gov	970-225-3572
NPS	Lab Services	Glen Canyon National Recreation Area maintains a lab with veliger identification and eDNA analysis capability but capacity is limited and it is not base funded at this time.	Western United States	Billy	Shott	Glen Canyon National Recreation Area, Superintendent	601 Nevada Way Boulder City, NV 89005	billy_shott@nps.gov	702-293-8990

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Reclamation	Lab Services (see description)	Reclamation's Ecological Research Laboratory provides expertise needed to detect invasive and endangered species in habitats associated with water resources management projects. Other expertise include, terrestrial and aquatic habitat and endangered species monitoring at construction and revegetation sites, development and implementation of integrated pest management plans, taxonomic and molecular identification of environmental samples, and bacteria community identification. Disciplines include chemistry, molecular biology, botany, entomology, water quality, engineering, limnology and ecology. Detection methods utilized in the laboratory include: microscopy, spectrophotometry, polymerase chain reaction, gene sequencing, genetic barcoding and FlowCAM imaging technologies.	Supports the 17 western United States	Jolene	Trujillo	Reclamation's Integrat	Denver Federal Center 6th & Kipling, Bldg 67 Denver, CO 80225	Jtrujillo@usbr.gov	303-445-2903
Reclamation	Lab Services	Reclamation's Columbia River Basin has a Regional Lab that can assist with monitoring/collection, PLM analysis, and standard water Quality	ID, WA, OR and western Montana	Heidi	McMaster	Columbia Pacific Northwest Region IPM/Invasive Species Coordianator	1150 North Curtis Road, Suite 100 Boise, Idaho 83706-1234	hmcmaster@usbr.gov	208-378-6209
Reclamation	Dive Team	Reclamation's Columbia River Basin has a Regional dive team that could be mobilized to support diving operations in the Columbia River Basin.	ID, WA, OR and western Montana	Heidi	McMaster	Columbia Pacific Northwest Region IPM/Invasive Species Coordianator	1150 North Curtis Road, Suite 100 Boise, Idaho 83706-1234	hmcmaster@usbr.gov	208-378-6209
Reclamation	Staff time	Reclamation's Ecological Research Lab can support rapid response actions with personnel from a diverse range of professional backgrounds.	Supports the 17 Western United States	Sherri	Pucherelli	Ecological Research Laboratory Mussels Task Force Rep	Denver Federal Center , 6th & Kipling, Bldg 56, Denver, CO 80225	spucherelli@usbr.gov	303-445-2015
Reclamation	Boats	Reclamation's Ecological Research Laboratory has access to boats. Number, type, and size capacity vary across the West.	Supports the 17 western United States	Sherri	Pucherelli	Ecological Research Laboratory Mussels Task Force Rep	Denver Federal Center , 6th & Kipling, Bldg 56, Denver, CO 80225	spucherelli@usbr.gov	303-445-2015
Reclamation	Dive Team	A dive team that could be mobilized to support diving operations across the West.	Supports the 17 western United States	Sherri	Pucherelli	Ecological Research Laboratory Mussels Task Force Rep	Denver Federal Center , 6th & Kipling, Bldg 56, Denver, CO 80225	spucherelli@usbr.gov	303-445-2015
Reclamation	Remotely Operated Vehicles	Underwater viewing/filming capacity.	Supports the 17 western United States	Sherri	Pucherelli	Ecological Research Laboratory Mussels Task Force Rep	Denver Federal Center , 6th & Kipling, Bldg 56, Denver, CO 80225	spucherelli@usbr.gov	303-445-2015

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Reclamation	Boats	Reclamation's Upper Colorado Basin Region has boats. Number, type, and size capacity vary across the Region.	UT, NM, western Colorado	Robert	Radtke	Upper Colorado Basin Mussels Task Force Rep	125 South State Street, Room 8100 Salt Lake City, UT 84138-1102	rradtke@usbr.gov	801-524-3719
USACE	Funding	USACE can provide Non-Federal Sponsor's funding for Rapid Response Actions, provided there is an active Cost-Share Agreement under 33 USC 610 for those purposes.  Under an active agreement, USACE can also cost-share a Non-Federal Sponsor's acquisition of Rapid Resposne equipment, training, and response exercises.  Currently, USACE has authority to enter into cost-share agreements with states to protect the Columbia River Basin, Upper Missouri River Basin, South Platte River Basin, Upper Colorado River Basin, Russian River Basin, and Arkansas River Basin.	Western States with Active Cost-Share Agreements	Alex	Colter	Project Manager for USACE's Aquatic Invasive Species Cost-Share Program		alex.j.colter@usace.army.mil	509-527-7254
USACE	Man Power	USACE can support rapid response actions with personnel from a diverse range of professional backgrounds. Labor resourcing can be provided to USACE personnel through the Aquatic Plant Control Program.	No	Jeremy	Crossland	National Program Manager for Land Use and Natural Resources, USACE Headquarters.	441 G Street NW, Washington, DC 20314	jeremy.m.crossland@usace.army.mil	202-761-4259
USACE	Inhouse Dive Team(s) and Dive Contracts	Depending on region, USACE has some inhouse dive teams that could be deployed to support rapid response actions, labor would be funded through the USACE's Aquatic Plant Control Program Funding.  Additionally, the USACE maintains several contracts for Diver Support that could be leveraged to support rapid response actions. Actions would be supported through Aquatic Plant Control Program Funds.	No	Jeremy	Crossland	National Program Manager for Land Use and Natural Resources, USACE Headquarters.	441 G Street NW, Washington, DC 20314	jeremy.m.crossland@usace.army.mil	202-761-4259
USFS	Dive Team	The Forest Service Southern Region and Southern Research Station has scientific and commercial divers with taxonomic expertise that could be mobilized to support diving operations in the West.	No	Zanethia	Barnett	Regional Diving Safety Officer R8/SRS	Center for Bottomland Hardwoods Research 1000 Front St Oxford, MS 38655	zanethia.c.barnett@usda.gov	662-234-2744 x268
USFS	Dive Team	The Forest Service, Pacific Northwest Region and Pacific Northwest Research Station has scientific and commercial divers with taxonomic expertise that could be mobilized to support diving operations.	No	Bruce	Hansen	Regional Dive Safety Officer R6/PNW	Corvallis Forestry Sciences Lab, 3200 SW Jefferson Way, Corvallis OR 97331	bruce.hansen@usda.gov	541-750-7311
USFWS	Dive Team	Certified team for mussels; requested through regional aquatic invasive species coordinator; as requested by partners following veliger or adult findings, and for early detection in Fort Peck Lake.	No	Joanne	Grady	Regional Aquatic Invasive Species Coordinator, DOI Regions 5 and 7	134 Union Blvd, Ste 665, Lakewood, CO 80228	joanne_grady@fws.gov	303-842-5268
USFWS	Remotely Operated Vehicle	Underwater viewing/filming capacity.	CO, KS, MT, ND, NE, SD, UT, WY	Joanne	Grady	Regional Aquatic Invasive Species Coordinator, DOI Regions 5 and 7	134 Union Blvd, Ste 665, Lakewood, CO 80228	joanne_grady@fws.gov	303-842-5268
USFWS	Hot water pressure washer	USFWS maintains three trailered hot water pressure washers at stations in UT, CO, and MT that could be called up for a short term rapid response.	Most likely eligible within station's state, but could be made available within western United States	Joanne	Grady	Regional Aquatic Invasive Species Coordinator, DOI Regions 5 and 7	134 Union Blvd, Ste 665, Lakewood, CO 80228	joanne_grady@fws.gov	303-842-5268

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USFWS	Boats	USFWS Fish & Wildlife Conservation Offices maintain watercraft for fish sampling and invasive carp detection.	Most likely eligible within station's state, but could be made available within western United States	Joanne	Grady	Regional Aquatic Invasive Species Coordinator, DOI Regions 5 and 7	134 Union Blvd, Ste 665, Lakewood, CO 80228	joanne_grady@fws.gov	303-842-5268
USFWS	Staff time	USFWS Regional Aquatic Invasive Species Coordinators would be able to assist with rapid response planning and communication.	Dependent on location	Joanne	Grady	Regional Aquatic Invasive Species Coordinator, DOI Regions 5 and 7	134 Union Blvd, Ste 665, Lakewood, CO 80228	joanne_grady@fws.gov	303-842-5268
USGS	Lab Services (Identification, eDNA ID tools)	USGS maintains genetic and taxonomic expertise in dreissenid mussels and can help with species identification.	No	Patrick	Kocovsky	Aquatic Invasive Species Program Manager	12201 Sunrise Valley Drive, MS300 Reston, VA 20192	pkocovsky@usgs.gov	571-205-1487