

Quagga-Zebra Mussel Action Plan for Western U.S. Waters
2010 Projects

COLORADO

- **Early-detection in Colorado (Colorado Division of Wildlife)** - \$40,000 in Service funds and \$84,000 of in-kind matching to publish a Containment Procedures for Positive Waters manual to complement the State ANS Handbook. Manual will be available in electronic format to all states for their use and adaptation.

MONTANA

- **Early-detection in Montana (Montana Wildlife and Parks)** - \$28,754 in Service funds and \$150,702 of in-kind matching to increase early detection in Montana's waters by strategically sampling 10 high priority waterbodies in Montana.

NEVADA

- **Using pressurized hot water spray to kill and remove dresenid mussels on watercraft: field testing on the efficacy of water temperature, high pressure, and duration of exposure (University of Nevada, Las Vegas)** - \$100,378 in Service funds and in-kind matching in time. This project will develop a standard protocol for killing and removing 100% of the quagga and zebra mussels for watercraft decontamination with pressurized water spray.
- **Develop effective decontamination protocols for wildland firefighting equipment to quagga/zebra mussels: testing the efficacy of quaternary ammonium compounds on killing dresenid veligers and adults (University of Nevada, Las Vegas)** - \$118,283 in Service funds and in-kind matching in time. This project will investigate the effectiveness of quaternary ammonium compounds (common cleaning agents used in homes, etc.) in killing quagga and zebra mussels to inform decontamination protocols for wildland firefighting equipment exposed to quagga and zebra mussels.

OREGON

- **Early-detection monitoring for quagga and zebra mussels in Oregon (Portland State University)** - \$45,489 in Service funds and \$14,489 of in-kind matching to increase early detection in Montana's waters by strategically sampling at least 10 high priority waters in Oregon.

TEXAS

- **Implementation of a monitoring and early detection program for zebra mussel invasion of Texas aquatic habitats (University of Texas at Arlington)** - \$55,000 in Service funds and \$53,090 of in-kind matching to monitor waters in northeastern Texas

and to develop and test an accurate and economically feasible zebra mussel monitoring system.

WESTERN STATES

- **Pilot laboratory testing program for the early detection of zebra and quagga mussels in Western U.S. waters (Bureau of Reclamation)** - \$103,559 in Service funds and \$38,250 plus time of in-kind matching to implement a pilot laboratory testing program to determine and improve the reliability of laboratory performance regarding early detection of *Dreissena* larvae in plankton samples.
- ***Dreissena* mussel early detection monitoring methods and quality assurance workshops (Bureau of Reclamation)** - \$72,236 in Service funds and \$32,000 plus time of in-kind matching to address key bottlenecks in the effort to expand early monitoring projects by holding two workshops. These workshops will improve the reliability of laboratory results by developing a standard protocol.
- **Update and adopt the recommended uniform minimum protocols and standards for watercraft inspection programs for dreissenid mussels in the Western United States (Pacific States Marine Fisheries Commission)** - \$28,232 in Service funds and \$12,561 of in-kind matching to survey and update the “Recommended Uniform Minimum Protocols and Standards for Watercraft Inspection Programs for Dreissenid Mussels in the Western United States” (UMPS) document for best practices protocols. The findings will be presented to the Western Regional Panel as an updated UMPS document which would serve as model for other groups.