Northwest Power and Conservation Council

January 4, 2012

MEMORANDUM

TO: Fish and Wildlife Committee members

FROM: Jim Ruff – Manager, Mainstem Passage and River Operations

SUBJECT: Follow-up Actions to Prevent the Spread of Invasive Mussels in the Columbia River Basin

Council staff has been meeting and working closely with state and regional aquatic invasive species coordinators in recent months on possible management actions to help prevent the spread of quagga and/or zebra mussels into water bodies of the Columbia River Basin. Staff will provide the Fish and Wildlife Committee members with an update of 2011 mussel prevention activities in the four Pacific Northwest states and some potential management actions for 2012. Staff would like to get Council member support for, and participation in, the possible management actions and recommendations.

Background

- Quagga and zebra mussels are native to eastern Europe and western Asia and were introduced into the Great Lakes in the 1980s via ships' ballast water. By the 1990s, the mussels had spread throughout all five of the Great Lakes and much of the Mississippi River Basin. Because zebra and quagga mussels can attach themselves to trailered boats and hitchhike between water bodies, there is great potential for them to continue to spread to uninfested waters, including the Columbia River Basin. It is by this vector that quagga mussels made the overland jump to Lake Mead in January 2007.

- Following the Lake Mead invasion, quagga mussels have spread to connected lakes and reservoirs in Arizona and southern California waters (via the California Aqueduct and Central Arizona Project). Quagga and/or zebra mussels have also now invaded other water bodies in Nevada, Arizona, California, New Mexico, Colorado, and Utah.

- The spread of quagga and zebra mussels has the potential to impair or interrupt water delivery and hydropower generation operations, as well as create long-term ecological and food web disruptions. Mussels are able to attach to all water-related infrastructure surfaces and thus clog pipes, pumps, trash racks, and cooling water and fire suppression

851 S.W. Sixth Avenue, Suite 1100
Portland, Oregon 97204-1348
www.nwcouncil.org

Steve Crow
Executive Director

503-222-5161
800-452-5161
Fax: 503-820-2370

systems. They can also build up on spillway gates and other hydraulic structures, restricting their functions. Once established, these tiny mussels can greatly increase the O&M costs of water and hydropower project facilities.

- To date, the waters of the Columbia River Basin remain mussel-free, and the four Northwest states hope to remain uninfested. While prevention efforts are ongoing at the borders of and within the four Northwest states, prevention at the source continues to be the best option to contain the spread of these invasive and destructive mussels.

Prevention Efforts

- The invasion of mussels to Lake Mead and other western water bodies has resulted in increased prevention efforts across the region by state and federal resource agencies. At the state level, numerous western states have increased their efforts in mussel prevention through enhanced monitoring, public outreach and watercraft inspection programs.

- The states of California, Colorado, Idaho, Montana, Oregon, Utah, Washington and Wyoming have all established boat inspection programs to check recreational watercraft for quagga/zebra mussels and other aquatic invasive species. Inspection stations have also been established by counties, local municipalities and groups such as the Lake Tahoe Regional Planning Agency.

- These inspection programs have so far proven to be successful in slowing the spread of mussels to uninfested water bodies in the Pacific Northwest, as evidenced by the number of mussel-fouled boats being intercepted within the region.

- For example in 2011, Idaho intercepted 25 mussel-infested boats at its border inspection stations, with 9 of those boats originating from the lower Colorado region. Since 2009, Idaho alone has intercepted a total of 36 fouled boats at its boat inspection stations. In 2011, Montana intercepted three fouled boats, Washington stopped five infested boats, and Oregon intercepted five fouled boats.

- It is notable that most of the watercraft inspection programs in the West are funded with few federal dollars, since nearly all states fund their inspection programs with state boater license fees or stickers. Of particular concern to many western resource managers is the continued interception of contaminated watercraft originating from federally-managed water bodies in Lower Colorado River (Lakes Mead, Mohave and Havasu).

Possible Management Solution

- It has become clear the current system to decontaminate watercraft leaving the federally-managed Lake Mead National Recreation Area (LMNRA) has been severely lacking in effectiveness. This is despite numerous and repeated requests from western states (Idaho, Washington, Utah and Wyoming) and organizations (Northwest Power and Conservation Council, Pacific NW Economic Region and the Colorado Fish and Wildlife Council) to the Secretary of Interior and/or the Superintendent of the LMNRA. These letters have urged the Department of the Interior, and the LMNRA in particular, to implement a higher level of control and notification of departing boats, particularly for those boats that have been moored under contract with their concessionaires.

- An opportunity to reduce the threat of contaminated boats leaving LMNRA has been provided through the FY 2012 Department of Interior budget. Language in the appropriations bill mandates that $1 million in funding will go to "the implementation of mandatory operational inspection and decontamination stations at Federally-managed or inter-jurisdictional water bodies considered to be of highest risk, as called for in the February 2010 Quagga-Zebra Mussel Action Plan for Western U.S. Waters." It is critical this funding be used for on-the-ground actions beginning early in 2012 to inspect and decontaminate infested watercraft leaving infested water bodies from the lower Colorado River, such as LMNRA. This would help to greatly reduce the number of contaminated watercraft entering uninfested jurisdictions including the Pacific Northwest.

- Western natural resource agencies, including those in the Pacific Northwest, have a wealth of institutional knowledge on implementing effective watercraft interception and decontamination programs. These agencies are ready and willing to assist the LMNRA in putting into action a decontamination program that effectively reduces the threat of contaminated boats leaving the lower Colorado River.

What the Council Can Do to Assist

- The Council can assist the western states by encouraging the Department of Interior, National Park Service and LMNRA to begin implementing effective prevention and notification measures immediately before contaminated watercraft start moving north and into the Pacific Northwest in the early spring.

- A Council member or staff could join a delegation from the Northwest states and Lake Tahoe to meet with the National Park Service Superintendent of the LMNRA early in 2012 to encourage using the $1 million in FY 2012 funding to immediately begin an effective prevention and notification program for all moored boats leaving the LMNRA.

- The Council could work closely with other interested parties to seek the involvement of our Congressional delegations to ensure the Department of Interior, National Park Service at LMNRA uses the $1 million in FY 2012 funding to immediately begin implementing prevention and notification measures of all moored boats leaving LMNRA.

w:\jr\ww\2012\1-10-12 q-z mussel briefing memo.docx