

Reply To
Attn Of: ECO-083

Informational Memo

Subject: Regional Invasive Species Update #7: August-October, 2004

From: Joan Cabreza
Regional Invasive Species Coordinator

To: R10 OETPA Management Team

ecc: Internal EPA mail group, & interested outside parties

The purpose of this memo is primarily to update the EPA OETPA Management Team on recent Invasive Species (IS) Program activity. However, I try to include other national, regional and state activities as well, and will be happy to include updates or activities from any reader who submits them. Credit for any errors is entirely mine.

EPA Projects & Initiatives

Grant to Lower Columbia Basin/100th Meridian* ANS Workgroup: In September, EPA awarded a \$15,000 contract to Pacific States Marine Fisheries Commission for printing zebra mussel brochures, plastic signs for boat ramps, and other educational materials. PSMFC has also set up a Columbia Basin Group/100th Meridian Initiative listserv for individuals working on Columbia River Basin ANS issues, to help us communicate more effectively.

(* Bi-national workgroup established to prevent the spread of zebra mussels west of the 100th meridian, and chaired by the PSMFC. EPA is one of about 20 member agencies.)

Regional Invasion Pathways Project. The research proposal "Regional transport and secondary spread of invasive species across Pacific estuaries", was ranked #1 out of the 7 considered by the R10 Regional Science Council. Nationally, Regional Science & Technology Directors are expected to meet and make final funding decisions by the end of October. The project proposes to prove two hypotheses: (1) that San Francisco Bay (the nation's most invaded location), is the source of most of the Pacific Northwest invasive organisms, and (2) that these species are transported to the Northwest via ballast water. A genetic screening tool will also be developed. Findings will have significant implications for coastal ballast water regulation development, and enforcement.

Environmental Indicators: HQ has accepted R10's suggested invasive species indicator "Non-indigenous species as ecological stressors in estuaries of Oregon and Washington" for inclusion

in EPA's Report on Environment. Thanks to Mike Rylko and Gretchen Hayslip for proposing this! This is (I think) the first time the report has included an indicator on invasives. Many invasives are stressors influencing the ecological condition of our waters, but they are rarely addressed in monitoring studies. This should help raise their visibility. *(For more info contact Mike at 553-4014.)*

Water Quality and Invasives Publication. One R10 action item from the February NISWG conference was the development of a publication describing impacts of invasive species on water quality. HQ has helped me to get this moving by developing a work assignment in their mission contract to assist with literature review, which will give us a good head start.

NEPA and Invasives: We have included invasive species comments into two important NEPA EISs: a Roadless Areas EIS, proposing to open a number of previously roadless areas to development (a gateway for new invasions) and a USFS Programmatic Invasive Plant Program EIS (prevention, control, and eradication) in 17 national forests and scenic areas in WA and OR.

Regional Compliance Plan/Regional Order: Regional Compliance Plan Development has been slow, partially because there is no formal top-down requirement for it. A Regional Order has been drafted, that (assuming it is signed), will stimulate all of the units to develop a compliance plan, and should also raise invasive awareness among the managers and staff.

Presentations: I continue to receive requests for invasive species presentations:

The August-October period included:

08/23/04 International Soc. for Ecological Restoration Conf.- Victoria BC (national update)
09-09-04 Western Regional Panel - Anchorage (PICES database update)
10/09/04 Bellevue Demonstration Garden - Bellevue WA (invasive plants & gardening)

Future Presentations Scheduled:

11/01/04 Garden club - Bellevue WA (invasive plants & gardening)
02/07?/05 AK Forum on the Environment Anchorage, AK (national/regional update)
03/10/05 Garden club - Seattle, WA (invasive plants and gardening)
03/29?/05 Puget Sound -Georgia Basin Research Conference -Seattle WA (ballast water tool)
04/04/05 Soc. for Ecological Restoration conference - Seattle (national/regional update)

NISWG* Conference Proceedings: In addition to monthly conference calls, the Workgroup is finalizing materials from the national invasive species conference at Research Triangle Park. Proceedings will be available in early 2005 in hard copy and CD. They will include a copy of the dozens of action items identified at the conference and the OWOW national strategy, which was revised based on input from the meeting. *(*EPA national Non Indigenous Species Workgroup, chaired by Henry Lee)*

EPA Knotweed and Ivy Projects: In August, 12 EPA staff assisted in a Nature Conservancy research project to determine impact of various herbicide dosages and injection locations in Japanese knotweed. Another 18 staff assisted Earthcorps in our third and fourth ivy removals,

October 22 and 29 in Seattle's Cheasty Greenspace. There will be more again next spring when weather improves.

Local/State Projects & Initiatives in R10 States

New Aquatic Bioinvasion Research and Policy Institute. The Smithsonian Environmental Research Center (SERC) and Portland State University (PSU) are jointly establishing a new Aquatic Bioinvasion Research and Policy Institute. The joint venture will provide an important catalyst for multidisciplinary understanding and management of biological invasions in coastal marine and freshwater ecosystems. The Institute seeks to develop novel approaches to research, management and policy on biological invasions. The Institute's activities will focus on basic and applied research and include strong components for student training and generating information resources for the public, resource managers and policy-makers. The Institute will be jointly administered by Dr. Gregory Ruiz (SERC) and Dr. Mark Sytsma (PSU).

New WA Invasive Species Council. Movement is underway to establish a state Invasive Species Council. The Bullitt Foundation (Kristin Rowe-Finkbeiner) has been instrumental in pushing for this. The first meeting to begin discussion of possible structure, membership, focus, and similar matters was held in October. Responsibility for beginning this dialog currently lies with the Governor's office.

WA State Invasive Species Committee: The WA State Invasive Species Committee has been reorganized. Until recently, it was chaired by the State Invasive Species Coordinator. Under the new organization it will now have federal and state co-chairs, and EPA and Ecology have been asked to be the new committee co-chairs. Current items on the Committee's plate include completion of the state Emergency and Rapid Response Plan and production of the ballast water report to the State Legislature.

WA Rapid Response Plan: The WDFW State Emergency and Rapid Response Plan has gone through several rounds of comments in the Executive Committee, and we shared it with the entire statewide committee at the October ANS meeting. The plan is targeted for completion in April.

Oregon Invasive Species Council Initiatives: The Pest Risk Assessment for Feral Pigs (*Sus scrofa*) in Oregon is now completed, and the pigs' economic and environmental impact potential has been rated as HIGH. The current feral pig population in OR is still small, but needs eradication before large-scale damage, such as that in California, occurs. A contractor has also been selected to assist in developing an education/outreach strategy to raise invasive species awareness in Oregon. *(For more information, contact Mark Sytsma at 503-725-3833)*

AK Forum on the Environment. In September, I met with USDOJ to help plan the invasives session for Alaska Forum On The Environment, to be held February 7-11, 2005, in Anchorage. This year will include invasive species sessions, with particular focus on marine organisms, fresh-water fishes, rats, and noxious weeds. The Forum is sponsored by a coalition of State, Federal, private, and Tribal organizers, and includes presentations and panels, a session on environmental career opportunities, a variety of organizational meetings, training classes, social

events, vendor displays/information booths, and a "talking circle" with community leaders and Tribal elders. Last year's Forum attracted nearly 1,200 participants.
(More information is available at <http://www.akforum.com/>)

Idaho Strategic Plan Development. The first public draft of the new Idaho strategic plan is now available for general comment. The Plan is an outgrowth of the February Governor's Invasive Species Summit, and I have been involved as part of the Program Coordination Workgroup. View the draft at www.agri.idaho.gov . (Contact Joe Hinson for more info, at joe@nmrg.org)

NEP* Estuary Exotic Species Detection Programs. Exotic Species monitoring programs for Puget Sound, Tillamook Bay and the Lower Columbia River Estuary are now completed. The plans include suggested criteria for determining the presence and status of exotic organisms; environments and species to monitor; sampling methods; sampling station locations and numbers, sampling frequency and timing; a system to facilitate recognition of new organisms discovered in the Sound; and also estimate monitoring plan implementation costs.
(* National Estuary Program . Contact Teresa Kubo for more info at 503/326-2859. View and download the Puget Sound report at http://www.psat.wa.gov/Publications/esdp_oth04-02.pdf or call (800)54-SOUND.)

Columbia River Aquatic Nuisance Species (ANS) Study: PSU is expanding the lower Columbia River ANS sample collection and literature searches upstream into the Mid Columbia River and Lower Snake Rivers, to include areas downstream of the Granite Dam and between Bonneville and Priest River Dams. (For more info contact Robyn Draheim Waldeck 503-725-3833)

Pacific Northwest Invasive Species Book. The UW book, now tentatively titled "Unwanted: Invasive species of the Pacific Northwest" should go to press by the end of the year. It contains both aquatic and terrestrial species, and is intended to be interesting to both biologists and non-biologists. Each species will have a map, picture, and description of the species and range, impacts, control and management methods, life history, and invasiveness history. It is co-edited by Sarah Reichard and Amy Van Buren, with multiple authors. I have completed the sections on carp (silver, bighead, grass, black and common carp) and the marine algae Dead-Man's Fingers (*Codium fragile* ssp. *Tomentosoides*).

WA Field Guide to Aquatic Non-Indigenous Species of the PNW: UW has produced a field guide to aquatic non-indigenous species of the Pacific Northwest, modeled on the Mac's Field Guide series of two-sided plasticized cards. The project was partially funded by the WA state and National Sea Grant Programs. The field ID cards debuted at UW's October 15th Come Together Washington campaign kickoff event. Cards were originally intended to give visitors to the marine invasions exhibit at Point Defiance Aquarium, as a tool they could use right away to identify and report species, and they hope to get the 1200 copies widely disseminated within the region. (To request a set, (contact Dave Secord at dave@u.washington.edu)

Western Regional Panel*. Alaska hosted the annual September WRP meeting this year in Anchorage. Agenda items included national, state and agency updates, updates on various invasions, and selection of this year's WRP grants. I attended, and provided an update for Henry Lee on his EPA/USGS estuarine database, now undergoing QA in EPA's Newport, OR, lab. The database currently contains species composition and key ecosystem attributes for over 500 sub-

estuaries along the West Coast, and taxonomic, habitat and distributional summaries and bibliographies for over 2600 species of fish, benthic invertebrates and sea grasses.
(*56-member international group; includes Mexico, Canada, & 17 states. For database info, call Henry Lee at 5541/867-5001)

Pacific Ballast Water Group: This group of US and Canadian agencies and industry was formed a few years back to discuss ballast water issues. It has been inactive for some time, but efforts are being made to re-start it; the second meeting was held in Portland in October.

Northwest Oregon Invasive Weed Management Partnership. The Partnership continues to focus on two initiatives. The first initiative is a brochure on ornamental alternatives for gardeners. The second is a 3-5 year, seven- watershed knotweed inventory and removal. Most patches are still somewhat young, so they feel total eradication is possible. Knotweed became widely established after the 1996 floods spread fragments from a few patches throughout the watersheds. (Alan Henning represents EPA on this group; for more info call him at 541/686-7838 x 251.)

A new record? In Hawaii, the number of non-native species in the wild just passed the number of native species (~51% non-native now).

Local Species Updates

New Colonial Tunicate in Puget Sound. A small patch of new invasive colonial tunicate, *Didemnum lahillei*, was discovered last month growing on an underwater wreck in Edmonds Marine Park. This species grows on hard substrate in colonies that resemble ragged hanging sponges. It has been devastating to shellfish on the East Coast, where it now ranges from Maine to Connecticut. It spreads rapidly, blanketing the surface of everything it touches, and preventing anything else from growing. When it covers mussels and oysters, they are unable to open their shells, and they starve to death. The Edmonds organisms are believed to have been brought in by ballast water. State and federal agencies coordinated an impressively rapid response. Eradication efforts were taken by placing a tarp with chlorine tablets over the colony. While this patch is (we hope) now killed, there was also widespread diver notification, and once people became aware of it, several infestations were found in other parts of the Sound, including one on mussel cages near Tacoma. The EPA dive team will be helping conduct preliminary surveys to determine extent of the invasion, and the new state Tunicate Response Advisory Group will hold its first meeting in November. (This is one example of why the state needs a rapid response plan. It also shows the value of involving the diving community).

Asian Gypsy Moth Detected in Idaho. Using DNA analysis, APHIS Methods Laboratory confirmed capture of a male Asian Gypsy Moth (AGM, *Lymantria dispar*) during the June 9 - Sept 7 period near Hauser, about a mile from the Washington border, and 30 miles from Spokane. No AGM is known to be extant in the U.S.A., and at this point the source of the captured moth is unknown. The Asian biotype of the gypsy moth has a greater host range than the North American Gypsy Moth (NAGM), and can spread more rapidly due to the capacity of the female to fly long distances compared to the flightless female of the NAGM.
(Call Sharon Collman for more information at 205/553-2876)

Additions to the WA Noxious Weed List: WSDA is proposing to add several species of invasive, non-native weeds to the list of plants prohibited from sale or distribution in WA, including three wetland and aquatic species (*Crassula helmsii*, *Sagittaria platyphylla*, and *Trapa bicornus*). The proposal also adds Japanese knotweed (*Polygonum cuspidatum*), Himalayan knotweed (*P. polystachyum*), giant knotweed (*P. sachalinense*), and Bohemian knotweed (*P. x bohemicum*), a hybrid of Japanese and giant knotweed, to the current noxious weed quarantine list.

Zebra Mussel Response Plan: The Western Regional Panel (WRP) is contracting for creation of a Rapid Response Plan for zebra mussels in the Columbia River Basin. This document is expected to summarize rapid response tools available; contain sections on tools that work in different types of water bodies; clearly list what agencies need to be involved and what their regulatory authorities are; give examples of successful early eradication; and give specific instructions to certain states, such as those affected by the Headwaters vs. Talent decision in the Ninth Circuit Court. This plan will lay a foundation for any state wanting to create its own zebra mussel response plan.

Washington *Spartina* Eradication. *Spartina* infestations continued to decrease in Washington this year. The WDA received approval for the use of Imazapyr, which is even less toxic than glyphosate, the only previously approved herbicide, and Imazapyr tests show that it is significantly more effective at a lower application rate than glyphosate. In Willapa Bay, the equivalent of 5700 solid acres of *Spartina* were sprayed within a 12,000 acre area this summer. Insect biological control populations imported from Rhode Island are also on the increase in Willapa Bay. Within Puget Sound, 90-95% of the infestations, an equivalent of ~650 solid acres, were treated this year. (For more info contact Kyle Murphy, at 360/902-1923 or Miranda wecker at 360/484-7128).

Spartina Invasion Study. Portland State University scientists have just begun a ocean current study to identify coastal locations at high-risk for *Spartina* invasion. Each month for the next year, 200 bright yellow biodegradable wooden drift cards are being released on outgoing tides at the mouths of Willapa Bay (WA) and Humboldt and San Francisco Bays (CA). These estuaries have significant *Spartina* populations and are potential sources of seeds or plant fragments. The drift cards will be carried by the ocean currents, behaving much as seeds or plant fragments would. Each card has a unique identification number, a toll-free phone number and an email address for reporting purposes. The cards are designed to persist for only a few months in the harsh conditions of the ocean. Anyone finding a card should contact the *Spartina* Watch Program with the card number, date found and exact location at 503-725-9767, toll-free at 1-800-880-6568 or email spartinawatch@pdx.edu.

Spartina Conference: The Third International *Spartina* Conference will be held Nov. 8-10 in San Francisco. (Learn more at <http://www.spartina.org/2004conference>)

Knotweed Symposium: The Snohomish Conservation District will host a knotweed symposium November 10, 2004 in Everett, WA. Topics include identification of invasive knotweeds, treatment methods and effectiveness over time, preliminary research findings, potential funding sources, and Cooperative Weed Management Areas.

(To register, contact lois@snohomishcd.org or call her at (425) 335-5634 ext. 4)

No-Ivy League: In May, nearly 900 people worked at 63 registered public and private No Ivy Day sites in the Portland and Olympia Metropolitan areas. They freed over 2700 trees and worked on more than 43 acres. The No Ivy League and 38 partners also scheduled October 23, 2004 as “Cut the Bloomin’ Ivy Day”. A significantly expanded No Ivy Day in 2006 will have partners from additional Oregon and Washington locations as well as from the East Coast and British Columbia. . <http://www.wivyremovalproject.org>.

Purple Loosestrife Biocontrol: King County has been using biological controls since 1996 to target noxious weeds. In August, Marymoor Park imported and released 275 *Galerucella* beetles from Grant County to devour purple loosestrife. Beetle releases each year have led to dramatic reductions of the weed on Foster Island and in Mercer Slough, and a large infestation near the Auburn SuperMall was also targeted. So far, thanks to beetles and other methods, the County considers nearly 70 percent of all purple loosestrife in King County to be under control.

National and International Activity

Canadian Strategy: Invasive species have been identified as a significant problem in several Canadian reports, including a May 2003 report from the House of Commons Fisheries and Oceans Committee; an October 2002 report released by the Attorney General of Canada; and the International Joint Commission's September 2002 Biennial Report. Canadian officials have now approved a national invasive species strategy. This will establish a coordinated national policy and management framework to minimize the risk of invasive alien species to the economy and environment.

Western Association of Fish and Wildlife Agencies (WAFWA) Resolution. WAFWA passed an invasive species Resolution at their annual meeting. The Resolution was based on the June, 2003, Western Regional Panel "Recommendations on State Actions to Improve Our Regional Capacity for Managing Aquatic Invasive Species".

Western Governor’s Association (WGA) resolution. WGA recently passed Resolution 04-12 “Undesirable Aquatic, Riparian and Invasive Species”. The Resolution includes convening a Working Group as part of a partnership between the WRP, the WAFWA, and the WGA, to work toward development and implementation of a comprehensive prevention program to prevent the spread of aquatic invasive species in the western states.

New Federal Interagency Committee. ITAP, the Federal Interagency Committee on Invasive Animals and Pathogens, was recently established to coordinate invasive species program planning and technical advice among Federal entities for terrestrial animals and pathogens not currently addressed by either FICMNEW* or ANSTF**. An MOU is now circulating to enlist Federal entities (USDA, USDOJ, DOD, DHS, CDC, State, EPA and the Smithsonian Institution) as partners. It is assumed that several EPA offices will be signatories. (*Federal Interagency Committee for the Management of Noxious and Exotic Weeds and **the Invasive Species Council’s Aquatic Nuisance Species Task Force). (Call Russ Jones 703/308-5071 for additional information).

IUCN Conference: The State Department has requested that EPA’s Office of International Activities help the Union of Concerned Scientists (IUCN) host an invasive species conference, with a specific reference to trade pathways. EPA/OIA is a member of IUCN, and IUCN has

worked on invasives in the Caribbean and Central America. Both State and EPA are working to integrate discussions of invasives into the environmental reviews of trade agreements, and State hopes to include invasives as part of the environmental cooperation agreement being negotiated for the Central America Free Trade Agreement.

Heinz Center Global IS Database: The Heinz Center is gathering information on the types of data collected on non-native species in the United States. This is part of an effort to develop a comprehensive database on invasives, and it will contribute to the development of a larger meta-database of non-native species databases, now being developed by the National Institute of Invasive Species Science (NISS). Ultimately, NISS will expand this to an international database. Data contributors will be able to establish links to the entire "shared database" through the NISS website, thus facilitating data-sharing among researchers, agencies, and organizations.

Aquarium Outreach Campaign: The national Aquarium Outreach Campaign began in Las Vegas in September. The campaign is a cooperative venture between the USFWS, NOAA, the National Sea Grant College Program, the pet industry, and the American Nursery and Landscape Association. The goal is to promote responsible consumer behavior among aquarium hobbyists, backyard pond owners, water gardeners and the pet industry.

Weed Newsletter. You might consider getting on the mailing list of free newsletter TECHLINE by emailing agwest@rkymtnhi.com or calling 1800 554-9333. The goal of the newsletter is to share new, innovative and proven invasive exotic vegetation management research and successes between federal, state, county, private and conservation organization weed managers.

Field Guide for Gardeners. National Wildlife Federation and eNature just launched a new field guide to native and invasive plants for gardeners that should be an invaluable resource to anyone wanting to garden in an environmentally friendly way. Unlike other native/invasive guides, this guide focuses on plants that are commonly found at garden centers or in plant catalogs, so it's relevant to the home gardener. The plant guides are searchable by state, and the native list can then be sub-divided according to plant type (for example, evergreen shrubs, wildflowers, vines or aquatic plants). Each plant has a color photo and a full field guide description as well. Check it out at http://enature.com/native_invasive/natives.asp.

Online IS Course. The U MT Center for Invasive Plant Management has developed a 7-week online course "Understanding and Assessing Plant Invasions: A Framework for Prioritizing Management Strategies" for resource professionals involved in invasive plant management. The purpose is to provide an integrated process that guides the development and prioritization of strategies for managing plant invasions, and to obtain professional input on the course (this is a refinement of a pilot course offered in 2002).

(For more information, contact Mary McFadzen at mcfadzen@montana.edu.)

Noxious Weed Control Act: The Noxious Weed Control Act, S. 144, went to President Bush in early October for signature. This bill was passed on the House of Representative's "Suspension Calendar", so it must comply with the rules governing such votes, i.e., the total cost of the bill must not exceed \$100 million over its lifetime. Therefore, the annual authorized expenditures were reduced to \$15 million, rather than the \$100 million originally intended. But this is still great progress! The main purpose of the new program is to provide a more coordinated and

collaborative effort for noxious weed projects. USDA will disburse funds to support eligible weed management entities carrying out state-approved on both public and private lands.

Brown Tree Snake and Carp Legislation. Congress recently passed H.R. 3479, the "Brown Tree Snake Control and Eradication Act of 2004" that establishes a pre-departure quarantine system for cargo shipped from Guam, and creates a Brown Tree Snake Technical Working Group. This bill will help ensure the snake does not enter Hawaii or the continental U.S. Congress also approved H.R. 4580 authorizing the additional funds for construction of a backup electric dispersal barrier on the Chicago Sanitary and Ship Canal to keep Mississippi River Asian carp from entering the Great Lakes and impacting [what's left of] the Great Lakes ecosystem.

ASTM Invasive Species Symposium: The ASTM "Symposium on Invasive Species: Their Ecological Impacts and Alternatives for Control" will be held April 19-20, 2005, in Reno, Nevada. They are seeking international participation, and plan to focus on both terrestrial and aquatic habitats and species. *Information is available at: <http://www.astm.org/>*

Invasive Species Grant Opportunities

EPA Regional Geographic Initiative (RGI) grants. RGI targets unique sector or geographically-based projects that fill critical gaps in the Agency's ability to protect human health and the environment. Invasive species projects are eligible. Region 10 is now accepting proposals for innovative projects ranging from \$10,000 to \$50,000. Applications must be postmarked no later than December 15, 2004. This program is available to state and local governments, independent school districts, state and private institutions of higher education, and Tribes. Detailed information and application forms are available from:

<http://yosemite.epa.gov/r10/ecocomm.nsf/bd5af81c438305ea88256b58006146ea/5d102290a6655a5288256c87007ba933?OpenDocument>.