Summary of Workshop Presentations Aquarium Industry Strategies for Consumer Awareness and Education about Introduced Aquatic Species Marriott Hotel, Monterey, California, May 23, 2005

The University of California – Davis, Department of Environmental Science and Policy, RIDNIS Project (Reducing the Introduction and Distribution of Non-native Aquatic Invasive Species Through Education and Outreach) sponsored an aquarium industry workshop on May 23, 2005 at the Marriott Hotel in Monterey, California. The California Bay Delta Authority funded the workshop.

The RIDNIS Project and the Pet Industry Joint Advisory Council (PIJAC) collaborated to convene the workshop for industry representatives to discuss strategies for educating the industry's customer base in California about ways to prevent the release of non-native aquatic plants and animals. Because this is a complicated issue affecting commercial businesses, a cooperative approach was thought to be the most effective strategy. In addition, since this was primarily an industry forum, PIJAC's involvement was instrumental in formulating the workshop outline and facilitating participation from industry members. All of the parties agree that the development of Best Practices is an involved process that cannot be put together hastily or in a vacuum if it is to be implemented successfully and have broad acceptance by industry. This workshop was one of the first steps towards that goal. Morning presentations were scheduled to give participants some background on the issues before the afternoon discussion of strategies began.

To ensure that the recommendations from the workshop reflected the best available information and considered the concerns of affected parties, the organizers invited representatives from many sectors of the aquarium industry. National, regional and local industry representatives were present, including wholesalers, distributors and retailers in the aquarium industry. Federal and state agencies, as well as NGOs and the Monterey Bay Aquarium were also represented. Please see the attendance list for complete affiliation and contact information for all workshop participants.

Marshall Meyers, Executive Vice President, Pet Industry Joint Advisory Council

PIJAC is the world's largest pet trade association. It represents industry retailers, wholesalers, distributors, manufacturers, hobbyist groups and trade associations. Marshall began his presentation with the compelling fact that 13 million households in the United States have aquaria. He gave an overview of HabitattitudeTM, a national public awareness and partnership campaign that promotes responsible consumer behavior focused on limiting the spread of potential aquatic species through the popular aquarium and water gardening hobbies. This joint Aquatic Nuisance Species Task Force Project initiated by PIJAC, the US Fish and Wildlife Service, and the National Sea Grant College Program (and now with many other partners who have joined the effort), asks consumers to adopt a conservation mentality while practicing their hobby. The message is '*do not release*' unwanted fish and aquatic plants into the natural environment. The campaign includes the use of many outreach tools, such as fish bags with a Don't Release sticker, retail store displays sporting the HabitattitudeTM logo, employee buttons, posters, bookmarks, door decals, ready-to-use CD presentations about the project, and a HabitattitudeTM website.

Kerstin Wasson, Research Coordinator, Elkhorn Slough National Estuarine Research Reserve

Elkhorn Slough National Estuarine Research Reserve (ESNERR) is one of 26 National Estuarine Research Reserves established nationwide as field laboratories for scientific research and estuarine education. The 1400-acre ESNERR hosts an aquatic invasive species research and education program that focuses on non-native plants and animals that have been found in the Reserve and Monterey Bay. Kerstin has documented the extensive invertebrate invasion of Elkhorn Slough (56 introduced species). Some of the invaders arrived on cultured oysters while others were transported through intraregional boat traffic from heavily infested ports like San Francisco Bay. Kerstin's research indicates that invasive species are much more common in estuaries than in more open coastal waters. She discussed the invasion of some parts of the slough by an Australian tubeworm that is forming vast reefs and changing the normally soft substrate of the slough, thereby impacting the native aquatic community as well as shorebirds.

Steve Lonhart, Marine Scientist, Monterey Bay National Marine Sanctuary

Steve discussed the status of the Monterey Bay National Marine Sanctuary's Joint Management Plan Review. After two years of scoping to establish priority issues and sorting though 12,000 comments from the review, aquatic invasive species emerged as one of the topics of primary concern by the public and the Sanctuary Advisory Councils. A draft Action Plan for Aquatic Invasive Species has been developed that focuses on introduction pathways, spread prevention, early detection, rapid response, and invasive species research, monitoring and education/outreach. The draft will be released by late summer or early fall of 2005.

Roger Phillips, Applied Research Manager, Monterey Bay Aquarium

The Monterey Bay Aquarium (MBA) has 160 non-native species on display in their live collections. In 1998 extensive treatment systems were installed for ocean discharges from the aquarium. Collection and management staff at the aquarium make every effort to ensure that non-native species are not released into Monterey Bay. The MBA is accredited every five years through the American Zoo and Aquarium Association. They also adhere to the strict guidelines of their Best Management Practice Manual, MBA Husbandry Protocols, the ocean discharge regulations of the state and regional Water Quality Control Boards, and California Department of Fish and Game regulations regarding release of non-native aquatic species. They complete extensive background checks on all their suppliers and isolate new acquisitions to prevent cross-contamination of their tanks and systems. They closely monitor their discharge treatment systems (ozone and UV light).

Guy Oei, Owner, Albany Aquarium

Guy has been in the aquarium business for 32 years. He offered his perspective on the needs of the customers that come into his store, and drew some comparisons between larger 'big box' stores (run by business managers) and small local retail stores (run by hobbyists). Guy caters to customers that prefer the European style aquarium – with 90% live aquatic plants and 10% fish. They are looking for challenges such as 'difficult to keep' plants and fish. They are likely to spend considerably more money and this investment prevents them from being tempted to readily release what they have in their tanks into the environment. Another difference between the two types of stores in his view is that shoppers in the larger stores tend to be impulse buyers that are more likely to just discard their purchase. For this reason,

education of staff in these locations is particularly important. It also makes sense to focus invasive species outreach efforts where the largest number of people will be reached. Guy has a partnership with his customers and feels they are receptive to information he gives them; however, he does not have time to create his own educational materials on aquatic invasive species. He would be willing to pass the information on to customers if ready-made materials were available. He also believes in having active trade-in or recycle programs so customers have an alternative to releasing into the environment.

Dick Au, San Francisco Aquarium Society

Dick has been involved in the aquarium hobby for 40 years. He has been a member of many aquarium clubs and has traveled extensively around the country to give talks to aquarium hobbyists. One of the primary problems with delivering the 'don't release' message to consumers is that they don't believe aquatic invasive plants and animals are a serious problem. They don't see the connection between their potential actions (dumping their unwanted fish and plants in the river out back) and resulting environmental harm. Dick also believes that press coverage about invasive species populations has been over-dramatized. In addition, information currently available about aquatic invasive species does not adequately explain the reasons behind the 'don't release' message or justify that any action needs to be taken. Even if customers did want to do something, the lack of clear alternatives to some of the problem species would prevent them from doing so. For those with illegal species, their fear of getting caught compels them to release into the wild. Dick recommends recycling aquarium pets by setting up Collection Stations (similar to the current motor oil collection stations) and better utilization of aquarium societies and hobbyist groups to spread the word about preventing the introduction of non-native species.