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Executive Summary

In August of 2008, a Hanjin shipping container from China loaded with granite arrived at Terminal 6 at the Port of Portland. Customs and Border Protection staff discovered an amphibian and several spiders and immediately resealed the container. Lack of identification of the amphibian and an inefficient communication structure delayed decisions and actions regarding the container and resulted in hundreds of hours of staff time across numerous agencies and organizations before it was ultimately resolved.

The US Fish and Wildlife Service and Port of Portland recommended producing this report and convening a workgroup comprised of the entities involved in the “Asian toad incident” to summarize the incident, assess whether actions taken were conducted in accordance with pertinent regulations, identify possible gaps in regulations, and make suggestions to improve interjurisdictional interdiction activities.

An analysis of the events revealed that all actions taken during the Asian toad incident were done so within the rules, regulations, and statutes of each entity. However, lack of an efficient communication structure that spans jurisdictions, the uniqueness of the incident, and failure to fully implement existing authorities contributed to delayed action and uncertainty.

The workgroup identified several gaps in state regulations and authorities, including:

- the loophole in Washington regulations that allows unlisted aquatic animal species to legally enter and be present in the state as long as they are not released into the wild;
- Oregon’s Wildlife Integrity Rules that need clarification, additional categories in the noncontrolled list, and language to distinguish between intentional and unintentional transportation of wildlife;
- weaknesses in Oregon Department of Agriculture authority that

prevent nonquarantine regulation of plant pests, and allow possession or movement of plant pests without appropriate state or federal permits;

- a pesticide permitting process that may contribute to delayed action;
- the inability of the Agriculture Animal and Plant Health Inspection Service to contact state agencies when a nonactionable insect of importance to the State of Oregon is discovered;
- taking full advantage of the capacity for USFWS to stop invaders that cross state lines via enforcement of the Lacey Act or other authorities associated with clearance of imported wildlife; and
- an inefficient communication system that fails to adequately and quickly notify all potentially affected agencies and entities when potentially invasive non-native wildlife are discovered.

The workgroup developed several recommendations to improve interjurisdictional interdiction activities, including:

- closing the loophole in Washington regulations that allows unlisted wildlife species to legally enter and be present in the state as long as they are not released into the wild;
- clarifying Oregon’s Wildlife Integrity Rules, adding categories in the noncontrolled list, and adding language to distinguish between intentional and unintentional transportation of wildlife;

- passing House Bill 2212, which authorizes the Oregon Department of Agriculture to adopt rules for nonquarantine regulation of plant pests, and prohibits possession or movement of plant pests except in compliance with federal or state permit;
- streamlining the pesticide permitting process to allow for more rapid response and use of pesticides for fumigation of shipping containers;
- supporting US Department of Agriculture-Animal and Plant Health Inspection Service action to request permission from the importer to release information on nonactionable insects of importance to the State of Oregon;
- exploring opportunities for the USFWS to enact the Lacey Act for invaders that cross state lines;
- and developing and implementing a communication system (Invader Alert) that promptly notifies all potentially affected entities of the arrival of an unintentionally introduced potentially invasive non-native species at the Port of Portland.

All entities agreed that the risk is minimized to Oregon and the United States if non-native wildlife that pose a potential threat are dealt with in Oregon by fully enforcing existing statutes. To determine if closing existing loopholes and improving communication would further protect each state, the region, and the nation from the introduction of invasive species, the workgroup discussed several scenarios regarding non-native invaders that arrive in shipping containers at the Port of Portland, including wildlife hitchhikers (species unknown), wildlife declared (species declared by importer), mitten crabs (as an example of a spe-

cies that is clearly prohibited under state and federal law), and insects. Working through these scenarios helped each entity understand roles and responsibilities and identify gaps and weaknesses. All concluded the development of an efficient communication system (Invader Alert) led and managed by the Oregon Invasive Species Council, would clearly result in improved communication and decision making. In addition, the workgroup recommended sharing this report and meeting with the Ports of Seattle and Vancouver, Washington, and entities in neighboring states (invasive species councils, USFWS special agents and wildlife inspectors, etc.) to improve interstate communication, reduce potential confusion, and encourage rapid response to invaders that arrive via shipping containers in Northwest ports.

Despite the initial confusion at the onset of the Asian toad incident, all workshop participants expressed gratitude for the high level of cooperation that occurred throughout the incident, acknowledged a great deal was learned from the incident, and are committed to working together to prevent recurrence of such an incident. Concurrently, however, agencies lack the capacity to inspect most imported cargo/containers, greatly increasing the potential for unintentionally introduced hitchhikers to pass through ports of entry undetected.

Purpose

The purpose of this report is to summarize the events related to an unintentional hitchhiker that arrived in cargo at the Port of Portland, assess whether actions taken were conducted in accordance with pertinent regulations, identify possible gaps in regulations, and make suggestions on how to improve interjurisdictional interdiction activities.

The report's analysis and recommendations not only reflect specific lessons from this case that can be applied if a similar container scenario happens again, but also address broader opportunities to enhance interagency coordination and intervention for a suite of unintentional "hitchhikers" detected in imported cargo into the Northwest.

Summary of the Incident

Terminal 6 at the Port of Portland is the only deep-draft container terminal located adjacent to the Columbia River just east of the confluence of the Columbia and Willamette rivers. Container ships at Terminal 6 carry hundreds of thousands of containers, breakbulk, and autos to and from the region's businesses each year. The 386-acre facility carries everything from imported electronics, clothing, tires and furniture, to Oregon's exports of agricultural products, machinery, and recyclable paper and steel. The largest

vessels arriving at Terminal 6 can carry up to 5,500 20-foot equivalent containers.

On August 1, 2008, Customs and Border Protection (CBP) staff was conducting a routine customs inspection of packing materials in Hanjin Container #HJCU8930650 that came from China loaded with granite. It arrived at Terminal 6, and was bound for the Port of Pasco in the State of Washington via barge, with an ultimate destination of Cost Less Carpets in Richland, Washington. The broker for the shipment was Global Trading Resources.

During inspection of the container packing materials, CBP staff observed an amphibian jump toward the opening of the container. The container door was closed, and the amphibian was re-resealed in the container. In addition, several spiders were observed in the container.

CBP staff contacted a Portland-based wildlife inspector at the US Fish and Wildlife Service (USFWS), the Plant Division Administrator at the Oregon Department of Agriculture (ODA), and Pest Program Manager at the Washington Department of Agriculture (WDA). The WDA confirmed with the broker that the shipment was expected to arrive at the Port of Pasco the week of August 11, 2008.

On August 4, 2008, a USFWS Aquatic Invasive Species Coordinator contacted the Environmental Manager at the Port of Portland and requested assistance in resolving the issue of the live unidentified amphibian in the cargo container. The Environmental



Terminal 6 at the Port of Portland. Photo courtesy of the Port of Portland.

Manager discussed the incident with the CBP Agriculture Program and Trade Liaison that same day. Also, the USFWS Aquatic Invasive Species Coordinator contacted the US Department of Agriculture-Animal Plant Health Inspection Service (USDA-APHIS) Plant Health Director, who determined the incident was outside USDA-APHIS jurisdiction.

On August 6, 2008, the CBP Agriculture Program and Trade Liaison noted that the container would not be re-opened in Oregon. Several federal and state agency representatives began exchanging emails and telephone calls, including Washington Department of Fish and Wildlife Aquatic Invasive Species Coordinator, the USFWS Aquatic Invasive Species Coordinator, and the Oregon Department of Fish and Wildlife (ODFW) Acting Invasive Species Coordinator. CBP concluded they no longer had responsibility for the disposition of the contents of the container. CBP also contacted a USFWS wildlife inspector (Portland), who handles import and export issues. The decision to not open the container again in Oregon prompted the ODA Insect Pest Prevention and Management Program Manager to conclude it was out of Oregon's jurisdiction. He contacted the WDA Pest Program Manager to inform them the container would soon be en route to Washington.

The Port of Portland concluded, after consultation with potentially affected organizations, that the responsibility for dealing with the unidentified amphibian falls on agencies within the state in which the container is opened.

The WDA Managing Entomologist noted in an email to involved parties that WDA made no commitment to fumigate the container. Because it was an international shipment, WDA staff thought APHIS or the USFWS would likely deal with the issue, however, the WDFW indicated they would deal with the situation if it wasn't resolved prior to the cargo container arriving in the state of Washington. WDFW staff also explained to Global Trading Resources staff about the legal consequences of an exotic amphibian escaping from a cargo container. Global Trading Resources made the decision to have the container fumigated in Oregon.

On August 6, Global Trading Resources checked with local fumigation contractors, Paratex



Top photo: Hanjin shipping container #HJCU8930650. Middle photo: The back of Hanjin shipping container #HJCU8930650. Bottom photo: The interior of the shipping container, showing palletized granite tile. Photos courtesy of Jesse Schultz, Washington Department of Fish and Wildlife.

and Joe the Fumigator, and confirmed it would be less expensive to fumigate the container in Portland versus the State of Washington. On August 7, the container was moved to a fumigation area.

On August 8, Joe the Fumigator recommended using methyl bromide as fumigant. The WDFW Aquatic Invasive Species Coordinator and WDFW Senior Research Scientist, serving in an advisory capacity, noted that methyl bromide would be an effective amphibian fumigant, and requested that paperwork be provided proving the container was fumigated prior to releasing the container to Washington. Also, the Port of Portland began reviewing shipping container

policies to determine if the Port can require shippers to fumigate (at the time, it was thought the amphibian was a frog, and frogs are not on the fumigator approved species list, which would require getting a Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) waiver from WDA before using the fumigant). It was then determined, after the USFWS Aquatic Invasive Species Coordinator conferred with a USFWS special agent—who talked with the US Department of Agriculture Pest Program Manager and the ODA Insect Pest Prevention and Management Program Manager—that label restrictions for methyl bromide and jurisdictional authorities for quarantining the container prevent the use of methyl bromide. [Note: Pesticide labels are not species-specific; label restrictions relate to the area in which the product will be used.] The ODA Insect Pest Prevention and Management Program Manager noted that aluminum phosphide is an allowable pesticide. The fumigator then needed a protocol and schedule to conduct the fumigation.

On August 11, 2008, the WDFW Senior Research Scientist, again serving in an advisory capacity, confirmed that aluminum phosphide would effectively euthanize live amphibians, such as frogs and toads.

On August 12, ODA Insect Pest Prevention and Management Program staff approved fumigation of the shipping container. On August 14, Global Trading Resources notified Terminal 6 berth agents to arrange for fumigation of the container.

From August 14–16, 2008, the temperature at the Port of Portland was 101 degrees Fahrenheit; it is estimated that the temperature inside the shipping container was much higher.

On August 18, 2008, the container was fumigated with aluminum phosphide by Joe the Fumigator (Portland), and was placed on a barge (#HJSH228U) to Pasco, Washington. It was determined that the container would remain sealed until a WDFW staff person was present upon opening in Washington.

On August 26, 2008, the WDFW Aquatic Invasive Species Coordinator documented that a WDFW biologist inspected the container and one dead and desiccated amphibian was found. No insects were found. The amphibian was placed in 5% formalin. The WDFW Senior Research Scientist identified



Top photo: The unidentified Asian toad discovered in the shipping container post-fumigation. Middle photo: A close-up of the Asian toad adjacent to a pallet of granite in the shipping container post-fumigation. Bottom photo: The Asian toad adjacent to a U.S. quarter to indicate size. Photos courtesy of Jesse Schultz, Washington Department of Fish and Wildlife.

the specimen as a member of the family of Bufonidae, a group that contains 350 species and 26 genera. The toad was shipped to China for bone analysis to determine if it could be identified to species.

Entities Involved in the Asian Toad Incident

The following entities were contacted and involved in the ultimate disposition of Hanjin container #HJCU8930650:

United States Bureau of Customs and Border Protection (CBP)—a federal agency of the United States Department of Homeland Security, charged with regulating and facilitating international trade, collecting import duties, and enforcing U.S. trade laws. Its other primary mission is preventing terrorists and terrorist weapons from entering the United States, apprehending individuals attempting to enter the United States illegally, stemming the flow of illegal drugs and other contraband, protecting the United States agricultural and economic interests from harmful pests and diseases, and protecting American businesses from theft of their intellectual property.

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US Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS)—a federal agency whose mission is to protect and promote U.S. agricultural health, regulate genetically engineered organisms, administer the Animal Welfare Act, and carry out wildlife damage management activities to protect and promote food, agriculture, natural resources and related issues.

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US Fish and Wildlife Service (USFWS)—a federal agency whose mission is to work with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people. USFWS maintains a law enforcement program that includes wildlife inspectors and special agents, who ensure that wildlife shipments comply with U.S. and international wildlife protection laws. The USFWS also maintains an aquatic invasive species management program.

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Oregon Department of Agriculture (ODA)—a state agency whose mission is to ensure food safety and provide consumer protection; protect the natural resource base for present and future generations of farmers and ranchers, and promote economic development and expand market opportunities for Oregon agricultural products.

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Washington Department of Agriculture (WDA)—a state agency whose mission is to support the agricultural community and promote consumer and environmental protection. One of its goals is to protect Washington State's natural resources, agriculture industry, and the public from selected plant and animal pests and diseases.

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Oregon Department of Fish and Wildlife (ODFW)—a state agency whose mission is to protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations.

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Washington Department of Fish and Wildlife (WDFW)—a state agency whose mission is to protect and enhance fish and wildlife and their habitats, and provide sustainable, fish- and wildlife-related recreational and commercial opportunities.

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Port of Portland—its mission is to enhance the region's economy and quality of life by providing efficient cargo and air passenger access to national and global markets.

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Roles and Responsibilities— Regulations and Authorities

US Customs and Border Protection— Department of Homeland Security

The Manual for Agricultural Clearance (http://www.aphis.usda.gov/import_export/plants/manuals/ports/downloads/mac.pdf) and the Animal Product Manual (http://www.aphis.usda.gov/import_export/plants/manuals/ports/downloads/mac.pdf) are the two guiding documents used by CBP in cases similar to the Asian toad incident. In particular, pages 3-3-22 and 3-3-23 of the Manual for Agricultural Clearance (Appendix 1) describe taking action on live or dead animals while clearing vessels. Table 3-3-11 provides guidance to CBP staff when USDA-APHIS Veterinary Services (VS) staff are not present. In this case, if a live animal other than a horse, ruminant, swine, canine or bird is discovered, CBP staff is authorized to “inspect cages for prohibited items and have them removed” and “Refer to the Fish and Wildlife Service.” If the animal discovered is a dead horse, ruminant, swine, canine or bird, USDA-APHIS-VS should be notified. If the dead animal is none of the above, no action is required by the CBP or USDA-APHIS-VS.

Page 2-1-2 of the Animal Product Manual (Appendix 2) describes procedures and cooperation with other federal agencies. This section notes that all amphibians, fish, and reptiles should be referred to a (USFWS officer or to CBP if the USFWS is unavailable so that it can be determined if the species is protected by the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES).

A summary of the laws enforced by the CBP can be found at http://www.cbp.gov/linkhandler/cgov/trade/legal/summary_laws_enforced/summary_laws.ctt/summary_laws.doc. CBP is not authorized to issue a quarantine for amphibians.

Based on these guidance documents, CBP is the first line of defense when dealing with non-native species in cargo containers. The CBP had the authority, by rule, to detain the container with the toad

(14.54), refuse clearance of the container, and notify the USFWS and importer of the presence of the toad. In this instance, the CBP followed their guidance manuals and used their authority to contact and inform USFWS and the importer.

USDA-Animal and Plant Health Inspection Service

USDA’s import requirements for animals deal with livestock-related animals—cattle, llama, alpaca, camel, exotics and wildlife, deer and elk, dogs and cats, horses and other equidae, poultry and pet birds, sheep and goats, and swine (CFR Title 9, Chapter 1, subchapter D, part 93). A subsection (<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=bd5248b2a5ba6d4e36caabcbad1be57a&rqn=div6&view=text&node=9:1.0.1.4.34.7&idno=9>) on miscellaneous animals only addresses hedgehogs, tenrecs, and three tortoise species—no amphibian species.

USDA’s plant inspection program relates to plant pests (<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=bd5248b2a5ba6d4e36caabcbad1be57a&rqn=div8&view=text&node=7:5.1.1.1.12.0.42.1&idno=7>). “Plant pest” means any living stage of insects, mites, nematodes, slugs, snails, protozoa, or other invertebrate animals, bacteria, fungi, other parasitic plants or reproductive parts thereof, viruses, or any organisms similar to or allied with any of the foregoing, or any infectious substances, which can directly or indirectly injure or cause disease or damage in any plants or parts thereof, or any processed, manufactured, or other products of plants (CFR Title 7, Chapter 2, part 352).

There are no USDA Aphis import requirements relative to amphibians, therefore, this incident was outside the jurisdiction of APHIS.

US Fish and Wildlife Service

The federal laws and regulations that apply to the Asian toad incident are as follows:

- The Lacey Act—makes it unlawful for any person to import, export, transport, sell, re-

ceive, acquire, or purchase any fish or wildlife or plant taken, possessed, transported, or sold in violation of any law, treaty, or regulation of the United States or in violation of any Indian tribal law whether in interstate or foreign commerce. All plants or animals taken in violation of the Act are subject to forfeiture as well as all vessels, vehicles, aircraft, and other equipment used to aid in the importing, exporting, transporting, selling, receiving, acquiring, or purchasing of fish or wildlife or plants in a criminal violation for which a felony conviction is obtained *where the owner should have known of the illegal transgression.*

- 18 United States Code & 42 (Lacey Act) - This is the part of the Lacey Act that deals specifically with Injurious Species—mammals, birds, amphibians, reptiles, fish, crustaceans, mollusks and their offspring or gametes that are injurious to the interests of human beings, agriculture, horticulture, forestry, wildlife or wildlife resources of the United States. Plants and organisms other than those listed at <http://www.gpoaccess.gov/cfr/index.html> (do a “Quick Search” for 50CFR16) and in Appendix 4 cannot be listed as injurious wildlife.

- Title 50 Code of Federal Regulations, Part 16 describes the species of wildlife that cannot be imported into the United States, however, it does not provide information on what can be imported on a state-by-state basis. For example, it is illegal to possess a piranha in Florida, however, this regulation does not make it illegal to import a piranha into the United States.

- 16 United States Code & 3372 (Lacey Act) - This (Appendix 5) is the part of the Lacey Act that makes it unlawful to violate a wildlife law in one jurisdiction (state, tribal, foreign), then transport that wildlife to another jurisdiction.

In addition, “. . . but no such live amphibians or any progeny or eggs thereof may be released into the wild except by the State wildlife conservation agency having jurisdiction over the area of release or by persons having prior written

permission for release from such agency.”

- Title 50 Code of Federal Regulations, Part 14 (Appendix 6)—provides uniform rules and procedures for the importation, exportation, and transportation of wildlife. Section 14.51 provides for inspection of wildlife, and notes that US Fish and Wildlife Service officers and Customs officers may detain for inspection and inspect any package, crate, or other container, including its contents, and all accompanying documents, upon importation or exportation. Section 14.52 describes clearance of imported wildlife, and notes that a US Fish and Wildlife Service officer must clear all wildlife imported into the United States prior to release from detention by Customs officers. Section 14.53 describes detention and refusal of clearance. Specifically, this section notes that:

(b) Refusal of clearance. Any Service officer may refuse clearance of imported or exported wildlife and any Customs officer acting under §14.54 may refuse clearance of imported wildlife when there are responsible grounds to believe that:

(1) A Federal law or regulation has been violated;

(2) The correct identity and country of origin of the wildlife has not been established (in such cases, the burden is upon the owner, importer, exporter, consignor, or consignee to establish such identity by scientific name to the species level or, if any subspecies is protected by the laws of this country or the country of origin to the subspecies level);

(3) Any permit, license, or other documentation required for clearance of such wildlife is not available, is not currently valid, has been suspended or revoked, or is not authentic . . .

14.54 Unavailability of Service officers.

(a) Designated ports. All wildlife arriving at a designated port must be cleared by a Service officer prior to Customs clearance and re-release. When importers or their agents expect live or perishable shipments of wildlife or wildlife products or request inspection at the time of arrival, they must notify the Service at least 48 hours prior to the estimated time of arrival. However, where a Service officer is not available within a reasonable time, Customs Officers may clear live or perishable wildlife subject to post-clearance inspection and investigation by the Service.

- Title 50 Code of Federal Regulations, Part 13—States you must have the appropriate permit for any activity that requires a permit.
- Title 50 Code of Federal Regulations, Part 23—States you must comply with the Convention on International Trade of Endangered Species (CITES).
- Title 50, Code of Federal Regulations, Part 17—States you must comply with the rules and regulations set forth in the Endangered Species Act.

Both the USFWS and the CBP can detain the cargo and notify the shipper/broker of the contents of the container and the reason for detainment.

Wildlife imported into or exported from the United States for any purpose must be declared to the USFWS and cleared prior to release by CBP. The definition of wildlife is “any wild animal, whether alive or dead, including any wild mammal, bird, reptile, amphibian, fish, mollusk (i.e., clam, snail, squid, octopus), crustacean (i.e. crab, lobster, crayfish), insect, sponges, corals, or other invertebrate, whether or not bred, hatched, or born in captivity, and including any part, product (including manufactured products and processed food products), egg, or offspring.”

The USFWS, in cooperation with CBP, has the authority to refuse clearance of cargo in which the

identity of wildlife has not been established (14.54, section 2), and has the option to export a container back to the country of origin.

Federal law notes that in cases in which a non-declared wildlife species is discovered in a shipping container, “the burden is upon the owner, importer . . . or consignee to establish such identity by scientific name. . .”

In this particular incident, the amphibian in the cargo container did not trigger the Lacey Act because it was not determined to be an injurious species by federal law. The cargo clearance process also initially failed to trigger further action under 50 CFR Part 14 (e.g., requiring specific identification of the toad) due to incomplete communication with the affected states. Thus, the issue was whether or not the contents of the container violated state wildlife laws in either Oregon or Washington.

The USFWS acted within its statutory authority because no federal law was violated. However, better communication between the USFWS and affected state agencies with the statutory authority to deal with non-native hitchhikers would have improved response time and decision making.

Oregon Department of Agriculture

ORS 570.305 is the guiding statute used by ODA relating to preventing insect and plant pests from entering Oregon. Specifically, this section of the statute, titled, Protective Measures Against Spread of Disease and Pests states, “Department officials to prevent introduction of pests and diseases. The Director of Agriculture, and the chief of the division of plant industry, are authorized and directed to use such methods as may be necessary to prevent the introduction into the state of dangerous insect pests and plant diseases, and to apply methods necessary to prevent the spread, and to establish control and accomplish the eradication of such pests and diseases, which may seriously endanger agricultural and horticultural interests of the state, which may be established or may be introduced, whenever in their opinion such control or eradication is possible and practicable.”

ODA has no specific statutory authority to

deal with amphibians entering Oregon, therefore, this incident was outside their jurisdiction.

ODA's Insect Pest Prevention and Management Section has the authority to issue permits for pesticide use. In this particular case, ODA provided a permit for Joe the Fumigator to use aluminum phosphide to euthanize any live amphibians in the cargo container.

Washington Department of Agriculture

WDA, similar to ODA, has the authority to deal with invasives that are plants or plant pests and other issues more closely tied to agriculture or forestry (horticultural pests and diseases RCW 15.08, insects pests and plant diseases RCW 17.24 in Appendices 7 and 8).

Washington's 16-30 RCW (Appendix 9) on "dangerous wildlife animals" authorizes the director of WDA to issue a hold order in an instance in which he/she deems import papers on an animal are incomplete or the animal could be potentially dangerous to the well-being of other animals in the state of Washington. However, the list of potentially dangerous wild animals in RCW 16.30.010 Section (2) does not include amphibians.

The Washington Department of Agriculture has no specific statutory authority to deal with amphibians entering the state, therefore, this incident was outside their jurisdiction.

Oregon Department of Fish and Wildlife

Oregon Administrative Rules ORS 635-056, titled, "Importation, Possession, Confinement, Transportation, and Sale of Nonnative Wildlife," (Appendix 10) is the statute that provides guidance to ODFW on issues relating to nonnative wildlife in Oregon. These rules, known as Oregon's Wildlife Integrity Rules, are intended to protect Oregon's native wildlife by regulating human actions involving nonnative wildlife.

The "Transportation of Wildlife" section of 635-056-0090 notes that wildlife can be transported through the state without an import permit from ODFW if the animal is in the state no longer than

72 hours; is not sold, purchased, exchanged or offered for sale, purchase or exchange or otherwise transferred while in the state; and is accompanied by an import permit from the Oregon Department of Agriculture, if required, and proof of legal possession. The statute also states that if an animal being transported through the state must remain in the state longer than 72 hours due to unexpected delays, the person transporting such animal must notify the department's Salem headquarters office. Such notification shall include the type of species being transported and the location of the animals. In this incident, OAR 635-056-0090 Transportation of Wildlife would not apply because this was not an intentional attempt to move wildlife through the state—this was a "hitchhiker."

The animal was not identified to species, therefore this amphibian would be considered a "Prohibited Species" until classified by species. Thus, its presence in the state of Oregon was illegal.

OAR 635-056-0050 Prohibited Species (1) Except as otherwise provided in these rules or other rules of the commission, live wildlife listed below may not be imported, possessed, sold, purchased, exchanged or transported in the state.

ODFW had authority, working cooperatively with Oregon State Police (who enforces Oregon's Wildlife Integrity Rules), the broker, USFWS, CBP, and ODA to recommend fumigation of the container using a pesticide approved by ODA. The importer bears the cost to fumigate the container.

ODFW did not exercise its legal authority to enforce Oregon's Wildlife Integrity Rules for two reasons—a critical position vacancy within the organization and lack of clarity based on the uniqueness of this event. At the time of the incident, the Invasive Species Coordinator position was vacant, leading to a lapse in communication. Since this Asian toad incident, ODFW staff has consulted with legal counsel to clarify the legal authority of the agency should this type of incident occur again. ODFW now has clearer understanding of their statutory authority and

responsibility should they be notified of a non-native hitchhiker in a shipping container at the Port of Portland.

Washington Department of Fish and Wildlife

The Washington Department of Fish & Wildlife (WDFW) was involved in the case due to the final destination of the container being Pasco, Washington. While the container was at the Port of Portland, WDFW served only in an advisory capacity as to how they would handle the container once it came under Washington State jurisdiction. WDFW made it clear that they did not want the container arriving in Washington with a live non-native aquatic animal species (amphibian), and supported, based on the options available, a recommendation by the importer for fumigation of the container.

In general, there are four regulatory aquatic animal species classifications potentially applicable to this case study: deleterious exotic wildlife; prohibited aquatic animal species; regulated aquatic animal species; and unlisted aquatic animal species. Because this was an amphibian and a hitchhiker, it was easy to determine that it was neither classified as deleterious nor regulated.

The two remaining options were classification as prohibited or unlisted. Washington law states that if a species is identified as a prohibited aquatic animal species, WDFW can prevent its possession, import, purchase, sale, propagation, transport, or release. The violator incurs all costs for capturing, killing, or controlling the species by the department with potential addition of civil penalties. However, if the species is not identified as prohibited (as in this case study), WDFW is limited to its unlisted aquatic animal species classification, which prevents only its release into state waters.

Two statutes and three rules have potential implications for shipping containers with aquatic animal species hitchhikers (Appendix 11).

- RCW 77.15.250 Unlawful release of fish, shellfish, or wildlife—Penalty—Unlawful release of deleterious exotic wildlife—Penalty.

The department considers deleterious exotic wildlife to be of highest priority for prevention of introduction into the wild. Shipping containers carrying zebra or quagga mussels, European green crabs, or Chinese mitten crabs would qualify under the deleterious exotic wildlife regulation - there are no amphibians classified under this law. Other species under this law are larger mammals such as wild pigs, deer, mongoose, etc.

- RCW 77.15.253 Unlawful use of prohibited aquatic animal species—Penalty.

If it is not classified as a deleterious exotic wildlife, the department determines whether the species is on the “prohibited aquatic animal species” or the “regulated aquatic animal species” lists. In this case study, there are no amphibians classified as regulated and a determination of a prohibited species was not possible as it was not identified while alive, and the state of desiccation after retrieval has prevented identification to the species level to date.

- WAC 220-12-090 Classification- Nonnative aquatic animal species.

Subsection (1) provides a list of all prohibited aquatic animal species including (a) amphibians with 14 families and hundreds of species; (b) Reptiles with three families; (c) Crustaceans with six families; (d) Fish with eight families; (e) Mammals covering only nutria; and (f) Molluscs with two families. The toad species, once identified, could be a prohibited species on this list of prohibited aquatic animal species.

Subsection (2) provides a list of all regulated aquatic animal species including: (a) crustaceans; (b) fish; and (c) molluscs. Regulated species are non-native species that are allowed to be imported and released into the wild under strict regulations.

Any non-native aquatic animal species not on either list are classified as unlisted.

- WAC 232-12-016 Nonnative aquatic species. Subsection (2) provides the rules making it unlawful to import live aquatic organisms, including plants, for release into state waters without being accompanied by a zebra mussel-free certificate, and other general rules regarding the importation of prohibited aquatic

animal species.

- WAC 232-12-01701 – Aquatic nuisance species.

This is the rule supporting the deleterious exotic wildlife statute that provides the list of applicable aquatic animal species.

- WAC 232-12-064 Live wildlife.

Subsection (3) of this rule prevents the importation, transportation, or possession of live wildlife without WDFW permit and health certification by the Washington Department of Agriculture. This rule generally applies to intentional species importations than unintentional, but can be used for both.

Port of Portland

The Port of Portland is not a regulatory agency in the same sense as the other entities described here. The Port's statutory mission is to promote commerce by operating airports, marine terminals, and related facilities. The Port's relationship with other entities in the chain of commerce (shipping companies, brokers, longshore workers, etc.) is defined through tariffs and contracts, such as property leases and operating agreements. The Port Commission also adopts policies, including environmental policies, which guide the Port's conduct in matters having potential environmental impact.

The Port's relationship with the shipping companies and brokers in the present case is defined for the most part by the terms of Tariff 8 (Appendix 13), a federally approved tariff that establishes rates and rules for users of the Port's marine terminals. At Terminal 6 (the Port's container ship facility), the Port also has an operating agreement with Ports America (formerly Marine Terminal Corporation). The Port's environmental policy (Appendix 12) provides a basis for the Port to coordinate, form partnerships, and promote responsible stewardship of natural resources to the extent consistent with the Port's statutory purpose, regulatory obligations, and contractual commitments.

Terminal Tariff No. 8 provides guidance relative to the introduction of invasive species through

the Port. Specifically, Section 1.3, Damage to Port Property and the Environment, subsection B, Environmental Costs, notes that each user ("Facility User") of the Port's marine terminal facilities "will be responsible for the cleanup of any spills, releases, or discharges of pollution, *invasive species*, or hazardous materials into the air, land, groundwater or waterways in the vicinity of Port marine terminal facilities, and/or on Port property that emanate from or are caused by its vessel, equipment, or operations. If a Facility User does not immediately commence cleanup, the Port may undertake clean up operations, and the Facility User will promptly reimburse the Port."

The Port can refuse to allow vessels to discharge cargo deemed extremely offensive, perishable, or hazardous.

In this incident, the broker would most likely be deemed the "facility user," and would ultimately be responsible for costs associated with Port response to invasive species release. Other parties might also be held legally responsible.

Global Trading Resources - Broker

Global Trading Resources (GTR) was the broker for the shipment that included the Asian toad. From the onset of the incident, GTR sought to resolve the issue quickly, efficiently, and with minimal cost. However, they encountered difficulties determining which agency or agencies had the authority and jurisdiction to make a final determination on how best to resolve the issue. Once the decision was made to fumigate the container, they experienced delays because of uncertainty associated with use of particular fumigants.

The Toad Incident—Were Actions Taken in Accordance With Pertinent Regulations?

The actions taken during the incident with the Asian toad were primarily a result of five factors:

- the uniqueness of the situation (an incident

of this exact nature had never been reported before);

- lack of awareness and understanding of agency and entity authorities and regulations;
- lack of a mutually understood protocol;
- uncertainty about risk; and
- inefficient communication.

All of these factors contributed to inaction, a great deal of effort and time expended by several individuals in federal and state agencies as well as the broker and Port of Portland.

The potential for escape of non-native wildlife from this specific cargo container was minimized because of the short period of time the cargo container door was opened, high daily temperatures that likely euthanized anything that had been alive in the container, and ultimate fumigation of the container.

Making the decision to fumigate the container in Oregon minimized cost and the potential for further introduction of non-native wildlife in Oregon and Washington.

The Oregon and Washington Departments of Agriculture and USDA-APHIS do not have authority over live amphibians entering the states or the country, and as such, did not and could not play a role in this incident. WDFW rules allow unlisted wildlife to enter the state if they are not released into the wild, therefore, they had no authority in this instance, and served primarily in an advisory capacity.

The entities with authority and responsibility to deal with the cargo (including detaining, notifying other entities and dealing with the contents itself) included CBP, USFWS, ODFW, and the broker. The CBP took appropriate action in contacting the USFWS and ODFW upon discovering the live amphibian. USFWS took appropriate action in consulting with the Port of Portland, WDFW, and other entities. However, incomplete internal and external communication constrained the USFWS ability to maximize its role in ensuring that an unwanted exotic species was not cleared from moving out of the Port of Portland. WDFW took appropriate action by contacting the broker.

The presence of an unclassified amphibian in a cargo container triggers Oregon's Wildlife Integrity Rules, giving ODFW the authority, in concert with Oregon State Police, USFWS, CBP, and the broker, to resolve the issue through whatever means is determined most suitable, ranging from fumigation or incineration of the cargo container to shipping the sealed container back to the port of origin. ODFW did not exert its authority through Oregon State Police in this instance, primarily because this instance occurred in the midst of a personnel change within ODFW's Wildlife Diversity Program, and because of the uniqueness of the incident, which prompted a review of Oregon's Wildlife Integrity Rules and a determination by ODFW's legal staff regarding their authorities in this and similar cases.

Closing the Gaps

Several gaps were identified in existing legislation relative to non-native species.

Washington

Unlisted wildlife species can legally enter and be present in the state of Washington if they are not released into the wild. The loophole increases the risk of spread of non-native species. Closing this loophole could substantially reduce the introduction of non-native species to the state.

Oregon

Oregon's Wildlife Integrity Rules protect Oregon from potentially invasive non-native species because those species that are not classified ("unlisted" in the case of Washington) are not allowed in the state. ODFW can strengthen these rules by amending the statute to provide clarification, add some categories to the noncontrolled list (such as crustaceans), and add language to Transportation 635-056-0090 to distinguish between intentional and unintentional transportation of wildlife.

Oregon Department of Agriculture

Currently, if an insect is discovered in a shipping container by CBP, CBP staff place the specimen

in preservative, notify USDA-APHIS, and send the sample to Seattle, WA, for identification while the cargo is detained. USDA-APHIS then notifies CBP if the insect is “actionable,” i.e., if the insect is on a list of federally prohibited species. Actionable insects trigger an Emergency Action Notification and a series of steps that ultimately prevent the container with actionable insects from being opened before fumigation, incineration, or any other appropriate action that ultimately destroys the insect(s).

The state of Oregon also has a list of insects that are considered harmful to Oregon’s agricultural industry and natural resources. That list includes species such as the Japanese beetle, *Popilia japonica Newman*. This beetle is not federally listed because of its widespread distribution east of the Mississippi River, nevertheless, it is a species of great concern to Oregon. Because the CBP only takes action on federally listed species, cargo containing Japanese beetles would be allowed entry through the Port of Portland.

House Bill 2212 will help deal with this loophole. This bill, introduced in the 2009 Oregon Legislature, revises the quarantine authority of ODA, authorizes ODA to adopt rules for nonquarantine regulation of plant pests, and, most importantly, prohibits possession or movement of plant pests except in compliance with federal or state permit.

There was a delay fumigating the container because of label restrictions relative to the use of methyl bromide. Despite the fact that label restrictions change on a regular basis, opportunities exist to streamline the pesticide permit process to hasten resolution of permit issuance relative to fumigating cargo containers for non-native species. Lessening delays will save time and money, and will result in more humane treatment of wildlife hitchhikers.

USDA-APHIS

Currently, if the USDA-APHIS notifies CBP that an insect is nonactionable, CBP releases the shipment. There is no regulation that requires USDA-APHIS to contact ODA and advise them of the presence of a state-listed insect—confidentiality agreements prevent this federal-to-state communication from occurring.

The USDA Office of General Council (OGC)

made a ruling (based upon case law resulting from major lawsuits by importers in California) that APHIS, CBP, and other federal agencies that deal with “pests” of concern, not just insects, cannot pass information on the incident outside federal jurisdiction. An agency that does so could themselves become liable, not the federal government, in a tort case. The ruling is based on the federal preemption part of the Constitution on imports.

One way APHIS deals with this communication restriction is to discuss the issue with the importer and obtain permission to release the information. APHIS staff believe this solution is the easiest and most workable when a pest group is found for which APHIS has jurisdiction (e.g. soil, plant, invertebrate, insect), but does not have actionable quarantine authority for that specific pest.

USFWS

All species of wildlife have to be declared on a federal form before being cleared for entry into the United States. USFWS wildlife inspectors search for species/products in violation of foreign and federal law. If a specimen arrives at the Port of Portland that is not protected by foreign or federal law (injurious species), it is usually cleared, even if it is headed for a state in which it is not allowed.

The opportunity exists for the USFWS to contact ODFW and the wildlife agency in the state that will ultimately receive the cargo to determine if the discovered wildlife cause concern for either of the states, which could trigger actions to seize/destroy these wildlife, or reject the imported cargo, reducing the potential for spread of a non-native species and saving time and financial resources.

In addition, there is potential for the USFWS to initiate the Lacey Act to enforce interstate transport of non-native wildlife.

Detection, Response, and Collaboration

It is appropriate to reflect on the unanswered questions from the toad incident to develop a protocol for a more effective response to non-native wildlife in

cargo containers in the future. These, and other questions, should be considered to assess the scale of the response needed:

- Is there just one specimen, and if so, would that likely limit the potential for reproduction?
- Can the non-native wildlife be identified to species?
- Is the species in question capable of transmitting a disease harmful to humans or native fish and wildlife?
- Did other non-native wildlife exit the cargo container before other species were discovered?
- What is the risk that non-native wildlife will reach water at the destination?
- What if a maritime accident causes the container to fall off the barge en route to the destination?
- What is the potential for similar import shipments to be unloaded where a hitchhiking non-native wildlife species escapes without notice and/or without consequence? In other words, how should the intensity of response be scaled relative to more certain ANS risks (like boats coming from mussel-infested lakes) that Northwest states are struggling to address?

The Scale of the Threat

Determining the scale of the threat of any non-native species helps to define the scale of the response. Using NatureServe's Invasive Species Assessment Protocol (<http://www.natureserve.org/library/invasiveSpeciesAssessmentProtocol.pdf>) as a model (but recognizing lack of species identification limits the utility of the model) is one way to describe the threat of a non-native species. NatureServe ranks invasive species according to the level of threat to na-

tive species and ecological communities.

High: Species represents a severe threat to native species and ecological communities

Medium: Species represents moderate threat to native species and ecological communities

Low: Species represents a significant but relatively low threat to native species and ecological communities

Insignificant: Species represents an insignificant threat to native species and ecological communities

Factors that can drive a non-native species toward a high rating include “the ability to change ecosystem processes; ability to invade relatively undisturbed ecological communities; ability to cause substantial impacts on rare or vulnerable species or ecological communities, or high-quality examples of more common communities; wide distribution and general abundance where present; ability to disperse to new areas readily; and difficulty of control.” On the other hand, “species with minimal impacts on ecosystem processes, native species, and ecological communities will generally be assigned a rank of low or insignificant. Other factors that can push a species rank toward low or insignificant include the lack of potential to spread beyond a small existing range, stable or decreasing abundance within the current range, and ease of control.”

When considering the potential effect on native species, CBP and USFWS could consider the potential for outcompeting native species, hybridizing with a native species, parasitizing a native species, poisoning a native species, hosting a non-native disease that damages a native species, or distracting pollinators from a particular native species.

Even without species identification, a “best guess” determination could be made by considering similar species or groupings of species with invasive characteristics.

Protocols

The protocols used to resolve future incidents of non-native species hitchhiking in cargo containers that arrive at the Port of Portland are dependant on the species discovered and the assessment of the level of threat. However, all parties involved in the Asian toad incident agree that an “INVADER ALERT” system, a simple listserv that would alert potentially affected and interested parties regarding the discovery of a non-native species arriving with imported cargo, would greatly enhance awareness and communication and could serve to launch a conference call to discuss authorities and appropriate courses of action. [Note: there are other alert systems in place, e.g., US Geological Survey, regarding discovery of non-native species within natural areas or via other pathways.] The Oregon Invasive Species Council will develop and maintain this alert system.

The working group involved in assessing the Asian toad incident also worked through several scenarios to enhance understanding of roles and responsibilities and potential courses of action, depending on the type of non-native species discovered.

Scenario 1

Scenario 1 (Figure 1) is similar to the Asian toad incident, in which a non-native wildlife hitchhiker (species unknown) is discovered in a shipping container.

In this scenario, CBP discovers the hitchhiker, places a hold on the cargo, and notifies the USFWS.

USFWS determines whether or not the presence of the wildlife violates the Lacey Act (e.g., whether it is on the list of federally injurious species), the Endangered Species Act (ESA), and the Convention on International Trade in Endangered Species (CITES), etc.

If the USFWS determines that the non-native wildlife is not violating federal law or is not unwanted by the receiving state, the USFWS triggers the INVADER ALERT, contacts ODFW, the broker, and the state that will ultimately receive the cargo. ODFW contacts Oregon State Police, who enforces Oregon’s Wildlife Integrity rules. The broker contacts the importer, who is responsible for paying the costs to

ethanize the wildlife in the container (e.g., fumigation, incineration, etc.).

Scenario 1a

Scenario 1a is similar to Scenario 1, except that the importer declares the species of wildlife in the container. Federal law states that the importer must provide the USFWS with at least 48 hours notice so that the agency has adequate time to investigate the declaration and the contents of the container. In this scenario, the species declared could result in any number of actions: if it is a federal injurious species, the USFWS enforces federal regulations. If it is not a federal injurious species, ODFW has the authority, in consultation with Oregon State Police, CBP, USFWS, and the broker, to resolve the issue.

Scenario 2

Scenario 2 (Figure 2) involves the discovery of an undeclared species that is clearly identifiable and clearly prohibited (e.g., mitten crab) within a cargo container. In this scenario, CBP contacts the USFWS, who triggers the INVADER ALERT. The USFWS wildlife inspectors or special agents contact the broker, Port of Portland, and USFWS Aquatic Invasive Species and Research Coordinator, who contacts ODFW and the appropriate state agency in the state that ultimately receives the shipment.

If the USFWS Special Agent determines the mitten crabs were shipped intentionally without declaration, the USFWS works with state agencies to pursue a law enforcement investigation or determines the container should be resealed and shipped back to the port of origin.

In this scenario, the USFWS wildlife inspectors can also decide to resealed and ship the container back to the port of origin, especially if they are unable to contact a USFWS Special Agent for further investigation.

Scenario 3

Scenario 3 (Figure 3) involves the discovery of an insect by CBP in a shipping container. CBP places a hold on the shipment, places an insect specimen in preservative and ships it to Seattle, WA, for confirmation of species. USDA-APHIS notifies CBP the

insect is actionable (federally listed), which triggers an Emergency Action Notification by the CBP. The broker then has options regarding resolution of the

issue (e.g., fumigation, incineration, etc.). The importer considers the options, and the broker notifies CBP regarding the course of action.

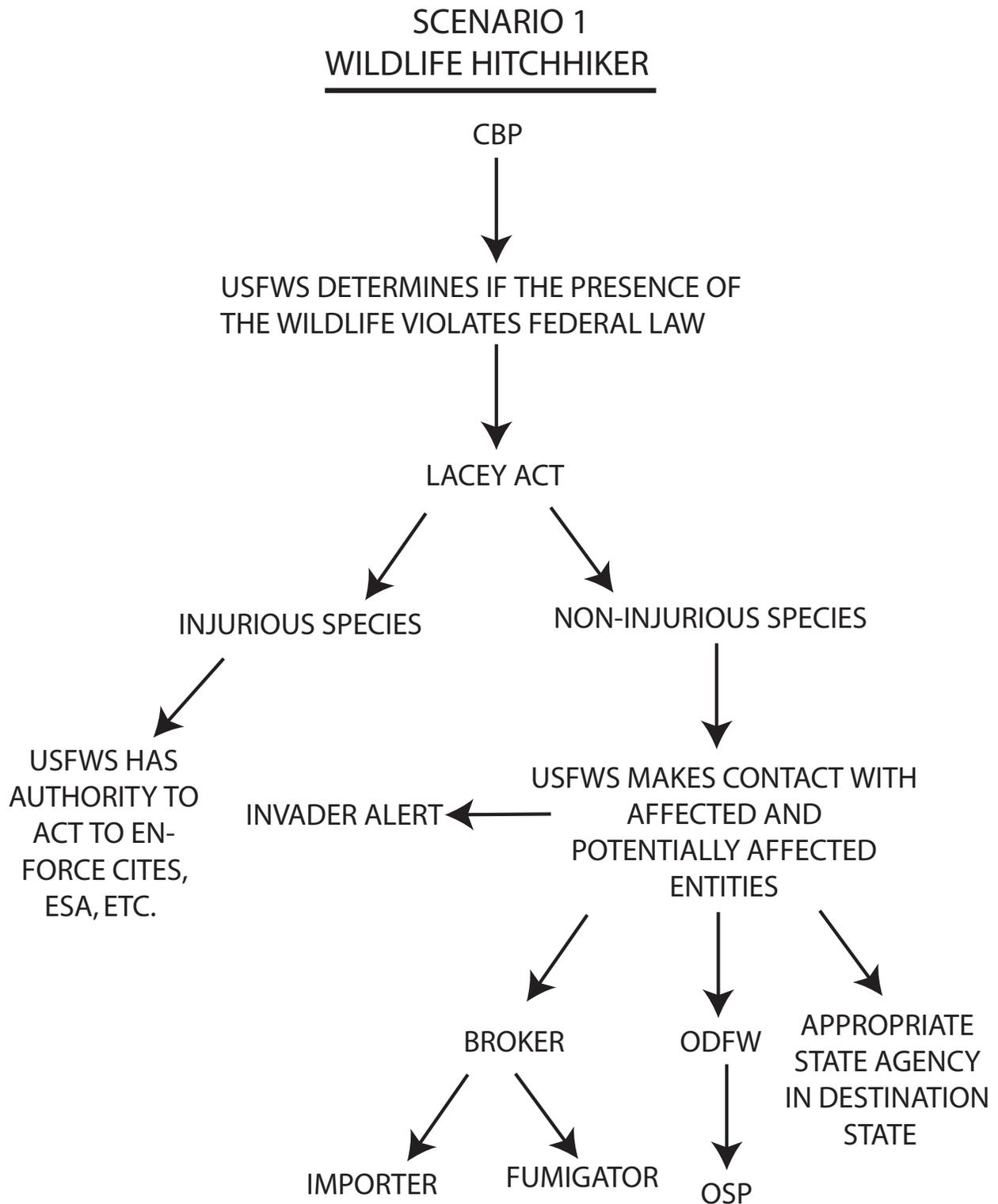


Figure 1. Courses of action possible if a wildlife hitchhiker arrives in a shipping container at the Port of Portland.

SCENARIO 2 MITTEN CRAB

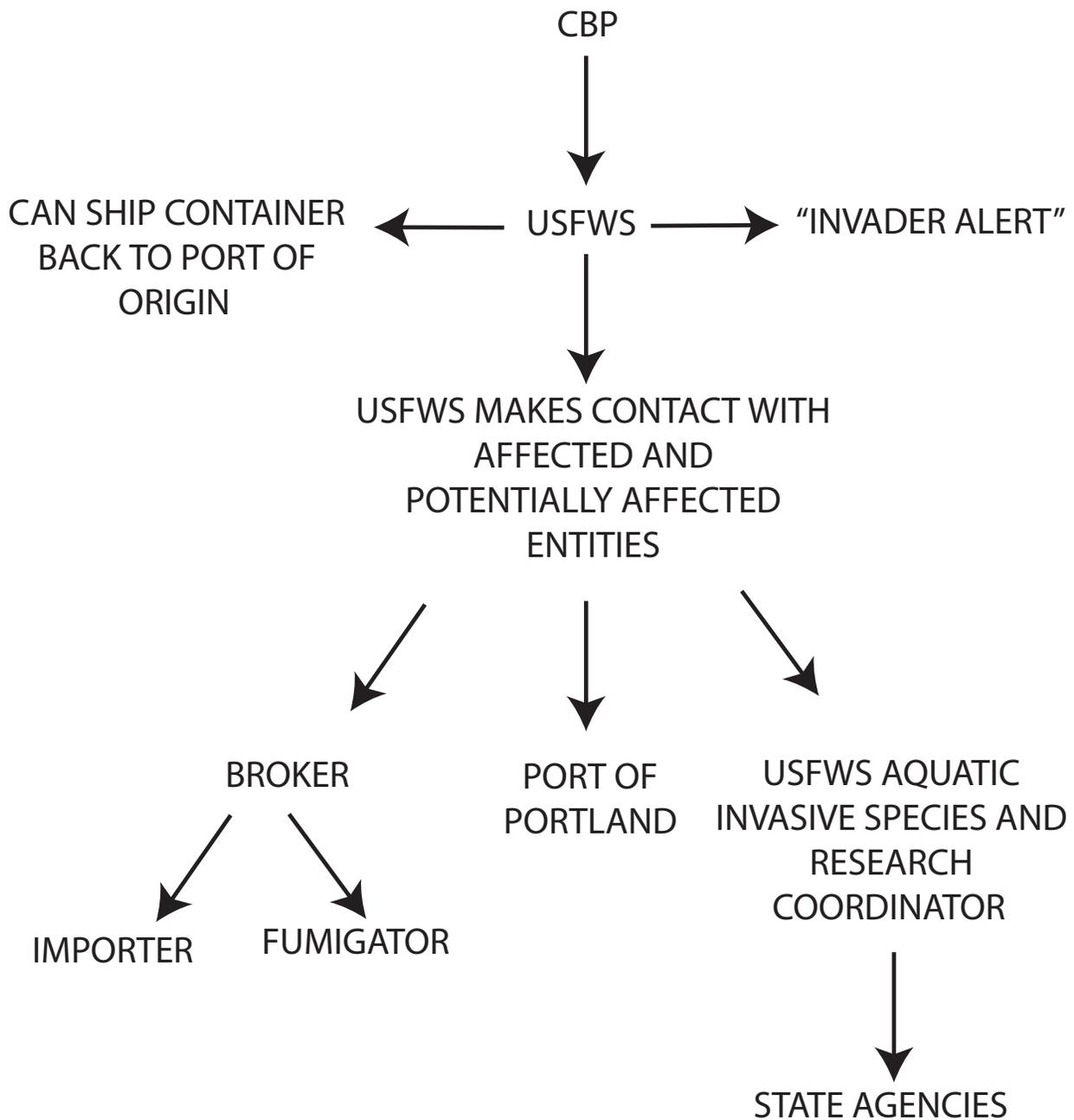


Figure 2. Courses of action possible when an undeclared species that is clearly identifiable and clearly prohibited (e.g., mitten crab) is discovered within a cargo container.

**SCENARIO 3
INSECT INVADER**

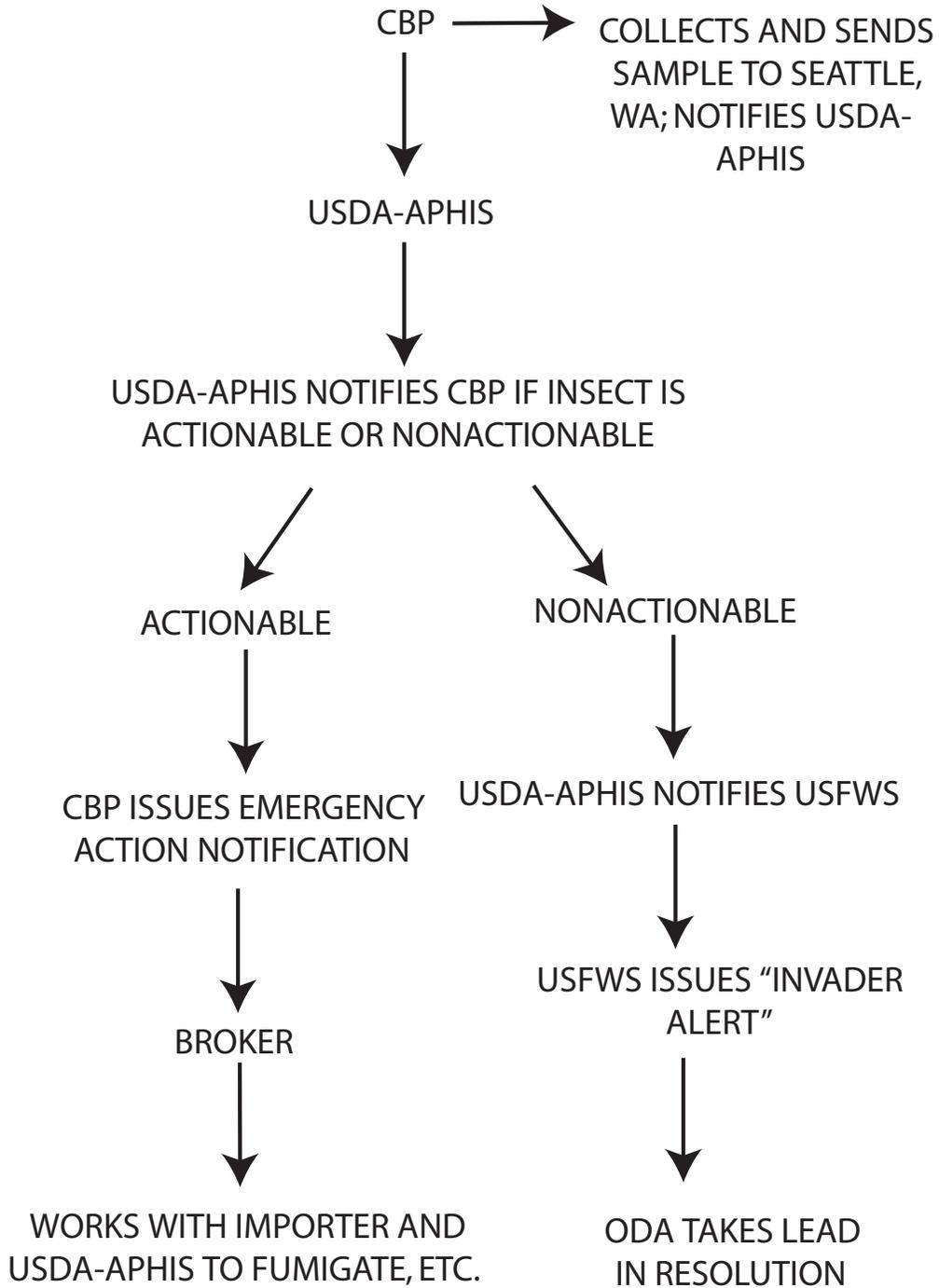


Figure 3. Courses of action possible if an insect invader arrives in a shipping container at the Port of Portland.



This report was developed by Creative Resource Strategies, LLC, for the US Fish and Wildlife Service, the Oregon Invasive Species Council, the Oregon Department of Fish and Wildlife, and the entities involved in the Asian toad incident of August 2008 at the Port of Portland.