Special

The unfolding of an AIS event: Atlantic salmon net pen escape [Washington]

"This dangerous and reckless industry not only threatens the recovery of our native salmon and orca populations, it threatens the health of Puget Sound and the Northwest's cultural identity. This disaster needs to be a wake-up call for the public to get involved, and to demand a halt to the expansion of the Atlantic salmon net pen industry into the Straits of Juan de Fuca."

Kurt Beardslee, Wild Fish Conservancy

"This event is not that unique and so far no Atlantic salmon escapes have established self-sustaining populations or caused known damage to wild stocks. This isn't to say it is not a concern, nor that we shouldn't carefully consider whether we want salmon aquaculture in this region, but to call this a disaster is a stretch."

R. Hilburn, University of Washington
TIMELINE:

8/18/17   Cooke Aquaculture net pen near Cypress Island fails; Atlantic salmon escape floating fish farm facility into Puget Sound. Current estimates range from 4,000 to 305,000 fish released.

WA DNR: Cooke Aquaculture Daily Situation Update

8/21/17   Cooke Statement on Damage to Cypress Farm

Exceptionally high tides and currents caused damage to a salmon farm that has been in operation near Cypress Island for approximately 30 years. It is estimated that several thousand Atlantic salmon escaped following a structural failure of part of the net pen structure on the Cypress Site 2 farm. It appears that many fish are still contained within the nets. It will not be possible to confirm exact numbers of fish losses until harvesting is completed and an inventory of fish in the pens has been conducted.

8/22/17   Please go fishing, Washington state says after farmed Atlantic salmon escape broken net

Lummi fishers out for chinook on Sunday near Samish, south of Bellingham Bay, were shocked to pull up the spotted, silvery-sided Atlantic salmon — escapees that turned up in their nets again Monday…[WDFW Press Release]

Related: Atlantic salmon escape U.S. fish farm near B.C. waters
A fishy excuse? Tribes say eclipse didn’t cause Atlantic salmon escape

8/23/17   Eclipse blamed for accidental release of thousands of Atlantic salmon into Puget Sound

“Exceptionally high tides and currents coinciding with this week’s solar eclipse caused damage to a salmon farm that has been in operation near Cypress Island for approximately 30 years.” – Cooke Aquaculture

Officials try to blame eclipse, tides for Atlantic salmon spill in Puget Sound

It was a convenient explanation. Officials said the eclipse brought on high tides around Cypress Island, off Washington state – and that’s why thousands of farmed Atlantic salmon managed to free themselves from their floating net pens in Puget Sound. It turns out that explanation doesn’t hold water…

Are they safe to eat? Debate continues over escaped Atlantic salmon

Return to top
A Bellingham seafood company and other advocacy groups are warning people not to eat Atlantic salmon that escaped a fish farm Saturday after a net pen collapsed in the San Juan Islands. But the Washington Department of Fish & Wildlife has declared open season on the non-native salmon to prevent them from entering local rivers, saying the fish are safe to eat…

8/24/17 Spill of farmed Atlantic salmon near San Juan Islands much bigger than first estimates

The company initially said Saturday that 4,000 to 5,000 of the nearly 2-year-old fish, weighing from 8 to 10 pounds, had escaped several damaged net pens in the farm. But by Sunday afternoon, "the whole thing came apart…

8/24/17 cont. Lummi tribe declares state of emergency over Atlantic salmon spill

Lummi Nation declared a state of emergency Thursday over a fish farm collapse that spilled thousands of Atlantic salmon into the Salish Sea, saying it threatened native salmon species….

WDFW asks anglers to report their Atlantic salmon catch online

…Although anglers are not required to log Atlantic salmon on their catch record cards, state fish managers are requesting anglers report their catch online in an effort to track fish being caught... See current map here [Reported Catch Total: 1548 through 9/1/17]

Related: Report Harvest of Atlantic Salmon in Alaska Waters

USGS Records

Statement from [Governor] Inslee regarding release of net pen-raised Atlantic salmon

"The release of net pen-raised Atlantic salmon into Washington’s waters has created an emergency situation that has state agencies working together to protect the health of our salmon. I have directed the Department of Ecology to put a hold on any new permits for net pens until a thorough investigation of this incident is completed. Tribes and others who fish Washington waters deserve a comprehensive response to this incident, including answers to what happened and assurances that it won’t happen again. I believe the company must do everything it can to stop any additional escapes and to recover as many fish as possible,
including adequate compensation for those working to remove Atlantic salmon from our waters.” - Governor Jay Inslee

Related: [State Agencies Initiate Incident Command to Address Atlantic Salmon Net Pen Escape](#)

8/27/17 **Press release regarding sixty-day notice of intent to file suit against Cooke Aquaculture**

"This dangerous and reckless industry not only threatens the recovery of our native salmon and orca populations, it threatens the health of Puget Sound and the Northwest's cultural identity. This disaster needs to be a wake-up call for the public to get involved, and to demand a halt to the expansion of the Atlantic salmon net pen industry into the Straits of Juan de Fuca.” – Wild Fish Conservancy

8/28/17 **State puts hold on new pens for farmed Atlantic salmon after mass escape in Puget Sound**

A planned expansion of Atlantic salmon net-pen operations in the Strait of Juan de Fuca is on hold and no new operations will be allowed under a permit moratorium imposed after a mass escape of farmed salmon…

**Lummi: Anglers have caught 20,000 farmed Atlantic salmon**

…Since [the Lummi Nation] declared a state of emergency on Aug. 24, it encouraged its anglers to continue fishing throughout the weekend to remove as many of the non-native species as possible. Since that time, Lummi anglers have brought in about 200,000 pounds of the fish, which is deemed as an invasive species….

**Escaped Atlantic salmon turning up in B.C. waters**

…Officials north of the border are following Washington's lead, encouraging Canadian anglers to fish B.C. waters for Atlantic salmon…

8/29/17 **An end to fish farming [Opinion]**

…WDFW also reported that it has captured Atlantic salmon smolts in a seasonal trap in the Chehalis River and at a migrant trap at the Mayfield Dam since 1986. That’s more than 30 years’ worth of proof of Atlantic salmon reproduction in Washington…

[Editors Note: The source of the smolts referenced above at the traps on the Chehalis River and Mayfield Dam (Cowlitz River) were likely escapees from Atlantic salmon hatcheries that have operated in both drainages. We are not

**Return to top**
aware of any evidence of Atlantic salmon successfully reproducing in either watershed to date. Also see Rochester fish farm fined for release of Atlantic salmon (5/7/2004)

Escaped Atlantic salmon found in waters near Sechelt

The shíshálh Nation said its fishermen caught three Atlantic salmon in the Sabine Channel near Sechelt on Monday — a discovery that’s prompting alarm bells for the Sechelt band…

8/30/17 Sens. Murray, Cantwell, WA Democratic Reps. Urge Immediate Action from Feds to Protect Native Salmon from Fish Farm Fiasco

… Citing the importance of wild salmon fisheries to Tribes, fishermen, and ecosystems in the state, the members of Congress are calling on NOAA and the Army Corps to direct federal resources to mitigate the risks of this incident, including the capture of the escaped farmed salmon. The letter also calls on the Army Corps to work to stop all permitting for new net pens or expansions to existing pens, as well as prioritize requests to update or maintain existing pens…. 

Atlantic salmon catches hint at widening circle of escaped fish in B.C. waters

Surrey sport angler Adam de Bosch Kemper’s accidental catch of Atlantic salmon in a smelt fishing net last Saturday night off White Rock offers further evidence of how far thousands of escaped salmon from a Washington State fish farm have spread in Canadian waters…

8/31/17 WADNR Cooke Aquaculture Daily Situation Update (8/31/17)

….The site is now clear of fish. The total number of fish recovered from the damaged farm site is 142,176

[Editor’s Note: Looks like about 160,000 fish escaped….but stay tuned for an official announcement]

[BC] Catch of farmed fish in Saanich Inlet alarms Tsartlip chief (8/31/17)

It is believed the salmon caught by Tsartlip band member Pete Henry was one of thousands that escaped when Cooke Aquaculture’s fish-farm enclosure in the San Juan Islands with 305,000 Atlantic salmon ruptured.

9/1/17 Atlantic salmon spill throws fish farms’ future in doubt

Cooke Aquaculture Pacific knew its Cypress Island farm was “vulnerable” before the spill that sent tens of thousands of Atlantic salmon into Puget Sound. This comes as the industry is under intense scrutiny in British Columbia…
DREISSENID MUSSELS

[Colorado] State and federal agencies find evidence of quagga mussel veligers in Green Mountain Reservoir (8/29/17)

State and federal officials have confirmed the presence of invasive quagga mussel larvae, known as veligers, in Green Mountain Reservoir located in Summit County along Hwy 9 between Silverthorne and Kremmling… [USGS Record]

Related: Tiny mussel larvae in Green Mountain Reservoir signals big threat to all Colorado water (8/29/17)
‘I’m just so angry’: Green Mountain Reservoir falls victim to invasive mussel (8/29/17)
CPAW is conducting more rigorous boat inspections after quagga mussel larvae were found in CO (8/30/17)

New surface is so slippery, shellfish can’t get a grip (8/19/17)

… The international team behind the new work has designed a material that mussels can't seem to get a grip on. It's not because the mussel's adhesive fail; instead, the mussel itself doesn't seem to know what it's touching when it's set down on the material…

Invasive mussels impact Great Lakes’ salmonid success (8/21/17)

Changes in the ecosystem of Lake Michigan suggest that it would be more suitable to stock with lake trout and steelhead rather than Chinook salmon, according to a new study… [Evaluating Stocking Efficacy in an Ecosystem Undergoing Oligotrophication]

[Kansas] Zebra mussels confirmed in Tuttle Creek (8/17/17)

The Kansas Department of Wildlife, Parks and Tourism has confirmed the presence of invasive zebra mussels in the Tuttle Creek Reservoir in Pottawatomie and Riley Counties… [USGS report]

[Texas] Lake Austin tests positive for zebra mussels (8/17/17)

Less than two months after zebra mussels were positively identified in Lake Travis, the Texas Parks and Wildlife Department announced that Lake Austin has tested positive for the invasive species…

Return to top
The B.C. Ministry of Environment has provided new details about boats intercepted carrying invasive mussels, including that four found with adult mussels were intercepted at Osoyoos. The ministry also said that nearly one in five drivers with boats is failing to stop at mandatory inspection stations at highways entering B.C. Of the 15 watercraft confirmed to be carrying adult mussels that were intercepted between April and the end of July, six were inspected in the Lower Mainland, four at the Osoyoos station, two at Golden and one each at Dawson Creek, Mt. Robson and Nelson. “It is important to note that we did receive advanced notification on 13 of the 15 mussel-fouled boats,” said Ministry of Environment spokesperson David Karn…

To enhance boat ramps on Clear Lake as part of an invasive species prevention program may cost more than the county anticipated. The county has been criticized for the current program, which relies on an honor system. Although boaters are required to obtain a sticker verifying their vessels are free of quagga mussels, in most cases there are no barriers to prevent unchecked boats from launching…

Related: California Boaters Can Help Fight Spread of Invasive Mussels Over Labor Day Weekend (8/28/17)

An inspector noticed hundreds of invasive mussels attached to a boat last month and prevented the owner from launching into Lake Nacimiento…The owner of the mussel-

Return to top
infested boat said he was unaware the invasive shellfish were on the vessel, which he recently purchased from Arizona, the release said…

Related: Invasive mussel prevention stepping up at Lake Nacimiento (8/27/17)


Some drivers with watercraft, especially in vehicles with kayaks or stand-up paddle boards, are missing the boat inspection signs on Interstate 90 in Washington just west of the Idaho state line…

[Montana] Wildland Firefighters Try To Combat Spread Of Invasive Species (8/23/17)

When fighting a wildfire, every minute matters. So it's striking that this summer, wildland firefighters in the West are using precious time cleaning their equipment. As Nicky Ouellet of Montana Public Radio reports, it's part of an attempt to avoid spreading invasive species that could cause billions of dollars in damage…

[British Columbia] Five boats heading to the Okanagan caught with invasive mussels (8/15/17)

… Since inspections began in April this year, 19,800 boats coming into B.C. have been checked, according to statistics from the provincial government provided to Kelowna city council. Of those, 15 were found carrying adult invasive mussels, five of which were headed for the Okanagan…

Related: Water advocates say feds need to do more to prevent invasive mussels from moving into B.C. (8/16/17)

[Minnesota] County launches cleaning stations to prevent aquatic invasive species (8/21/17)

On Monday, Hennepin County unveiled a new solar-powered watercraft cleaning station, which it will use to help prevent the spread of aquatic invasive species. The station, located at the Spring Park public boat access on Lake Minnetonka, is one in a pilot project of five…

MARINE

[California] Invasive crabs flourish in Marin lagoon, despite eradication efforts (8/17/17)
… “They have substantial impacts on local fauna, reducing native clams and native shore crabs by well over 90 percent,” said Ted Grosholz, a professor of environmental science and policy at UC Davis. “If we saw the densities we have seen in Seadrift in the rest of the Bay Area, they would have a significant impact on the shellfish industry.”

**What’s best weapon for battling species invading California waters? Data (8/19/17)**

There’s an invasion plaguing the coastal waters of Southern California. Waves of tiny interlopers spark havoc at fisheries, clog municipal water pipes and frustrate boaters who must dislodge buckets of sea crud…

**BALLAST WATER/BIOFOULING**

**EDITORIAL (Chicago Sun Times): Two big reasons to stand up for Lake Michigan (8/31/17)**

…In May, a U.S. Senate committee approved a bill that would weaken regulations designed to keep international ships from bringing invasive organisms to the Great Lakes in ballast water, which ships take on and pump out to improve stability. Ballast water already has dumped the quagga and zebra mussels in the lakes, and those creatures constantly block intake pipes for Chicago’s drinking water — an expensive problem…

[white paper] **Biofouling in the U.S. Pacific States and British Columbia**

The WRP Coastal Committee completed a white paper focusing on marine biofouling as a mechanism for the transport, introduction, and spread of nonindigenous species into the coastal and estuarine waters of the U.S Pacific states and the province of British Columbia.

Related: [More Biofouling "Casualties" to be Expected (8/28/17)]


On August 16, the U.S. Coast Guard fined the newly built bulker ANSAC Moon Bear a penalty of $5,000 for discharging untreated ballast water into the Willamette River in Portland, Oregon…

**Delaying ballast water compliance buys shippers time (8/28/17)**

The International Maritime Organization’s Marine Environment Protection Committee recently pushed back the compliance date of new ballast water management requirements for existing vessels. Now, many ships will not be required to install ballast water management systems until 2024, up to two years later than originally planned. Where does this leave shipowners and ballast water management system manufacturers?
Responses to questions about latest ballast water management system type approval certificate (8/17/17)

Maritime Commons received a few questions from our Twitter followers regarding the Ballast Water Management System type approval certificate issued to Echoclor Ltd., Aug. 11, 2017. In order to be as transparent as possible, we are sharing the answers to those questions through the blog in the event other readers have the same questions.…

New High Efficiency Ballast Water Cleaner Receives US Coast Guard Standard Approval (8/15/17)

The SeaCURE Ballast Water Management System (BWMS), an electro chlorination based solution pioneered by Evoqua Water Technologies, has successfully completed all biological efficacy US Coast Guard Type-Approval tests…

Ballast Water Treatment Systems Problematic (8/14/17)

Classification society ABS has published a report providing insights into how industry is progressing with ballast water management systems. Notably, only 57 percent of the systems installed on the vessels of operators surveyed were being operated. The remaining systems were either deemed inoperable or considered problematic…

FISH

Gizzard Shad found in Iowa Great Lakes (8/29/17)

SPIRIT LAKE, Iowa - The Iowa Department of Natural Resources (DNR) discovered 26, 3- to 5-inch gizzard shad, in East Okoboji Lake on August 11 as part of routine sampling. “We don’t know how gizzard shad got into the lake,” said Mike Hawkins, fisheries biologist for the Iowa DNR at Spirit Lake. “It is possible that someone intentionally put them in the lake.” This is the first time gizzard shad have been found in the Iowa Great Lakes. Gizzard shad were not sampled in West Okobojo Lake or Spirit Lake.

[USGS Record]

Asian carp found near Lake Michigan got past barriers (8/18/17)

An adult Asian carp found in a Chicago waterway near Lake Michigan this summer began its life far downstream and apparently got around a series of electric barriers intended to keep the invasive species out of the Great Lakes, officials said Friday. Autopsy results and a scientific analysis showed the silver carp, which was caught June 22, was a 4-year-old male that originated in the Illinois/Middle Mississippi watershed, according to the Asian Carp Regional Coordinating Committee…

Related: Our View: One dead Asian carp is no reason for $275M project (8/20/17)
[Nevada] Wanted: Illegal Fish Dumpers (8/24/17)

...In a seemingly unprecedented maneuver, the Nevada Department of Wildlife is offering $10,000 for information on the person responsible for releasing these [Northern pike] in the lake. Officials hope to catch the criminal or criminals—and impress on residents how threatening invasive species can be...

Northern pike documented farther down Lake Roosevelt at Hunters (8/18/17)

Despite a tribal gillnetting effort and a sportfishing bounty, non-native northern pike continue their downstream invasion of the Columbia River and Lake Roosevelt...

AQUACULTURE

[Indiana] 'Man-made fish' to be made in Delaware County? (8/21/17)

It's an FDA-approved product called AquAdvantage Salmon, which integrates a Pacific Chinook salmon growth-hormone gene into the genome of an Atlantic salmon. The Chinook gene is under the control of a "promoter" from an eel-like fish called an ocean pout...

OTHER

[Washington] Bryozoans found in Lake Sixteen (8/28/17)

...It is unknown whether they cause environmental or economic harm in areas where they are introduced, Washington Invasive Species Council Executive Coordinator Justin Bush said...

[Montana] DNRC hires invasive species outreach specialist (8/17/17)

Kate Wilson, who earned a Bachelor of Arts degree from Carroll College and a Master’s of Science at the University of Florida’s Center for Aquatic and Invasive Plants, has been hired as Invasive Species Outreach Coordinator for the Montana Department of Natural Resources and Conservation (DNRC).

Inoculations give endangered California frog a shot at life (8/30/17)

Endangered California frogs are getting an immunity boost from scientists who are scooping them up from remote Sierra Nevada ponds and sending them to big city zoos for inoculation, giving them a fighting chance to beat extinction, officials said Wednesday...
[Alaska] Sun’aq wins grant to study invasive species’ effect on subsistence resources (8/17/17)

“We’re not sure how they got here or even how long they’ve been here, but the population is breeding, and we’re worried about the subsistence resources and the fish that we all rely on and how the crayfish are impacting those resources,” Krueger said…

Canada should embrace invasive species [Editorial] (8/17/17)

Hostility toward foreign flora and fauna has become official policy in many places in Canada. Is there any logic to it?

Did Great Lakes Just Get Another Invasive Species? (8/15/17)

A new non-native species has been found in western Lake Erie, the EPA said Monday. It's named Brachionus leydigii. And it's a type of zooplankton, which means it could be food for lots of fish. But the EPA isn't sure whether little ol' B.l. will be harmful -- or helpful -- to the Great Lakes. The agency says there isn't enough scientific evidence to know yet.

Michigan crawfish invasion? Louisiana experts come to the rescue, and to feast (8/16/17)

As Michigan grapples with a never-before-seen invasion of red swamp "crayfish" threatening cities' infrastructures and ecosystems, mudbug experts from Lafayette have organized a Cajun culture lesson delivered in the way only Louisianians know how — a party…

WEEDS

[Minnesota] Starry stonewort found in third Stearns County lake (8/15/17)

The finding follows two other infestations of Stearns County lakes by the invasive…

Related: Catch me if you can: Divers hope to clear Grand Lake of starry stonewort before it spreads (8/23/17)

League to Save Lake Tahoe to host an aquatic invasive species training session in Incline Village (8/17/17)

…Whether it is spotting a floating piece of Eurasian watermilfoil while paddling along the lake, or coming across a chunk of curlyleaf pondweed, the League to Save Lake Tahoe wants to know, and wants more trained eyes looking for these invasive species…
JOBS/GRANTS

[Minnesota] Aquatic Invasive Species Inspector:

Looking for friendly and outgoing individuals to inspect watercraft for invasive species throughout Aitkin County. Must be willing to work most weekends and holidays. Get paid while helping stop the spread of invasive species in area lakes. Part time and full time positions available with a flexible schedule. We will provide all equipment and DNR training to qualified candidates. Must have the ability and agility to climb into parked watercraft.

FEDERAL/STATE/PROVINCIAL
LEGISLATION, RULES, ACTIONS

State/Provincial

Federal

Army Corps unveils $275M plan to battle Asian carp (8/7/2017)

…The Army Corps stopped short of recommending closure of the Brandon Road lock, citing the potential economic impact on the barge and shipping industry…

Related:
You can comment on plan to stop spread of Asian carp (8/29/17)

State Says Asian Carp Plan Too Expensive, Activists Say ‘Don’t Wait (8/29/17)

Keeping Carp out of the Great Lakes: Who Pays? (8/16/17)

Rauner admin fighting Asian carp plan (8/16/17)

[Editorial] Federal report on Asian carp contains good ideas, plans (8/15/17)
[Editorial] Corps' report a good starting point for Great Lakes (8/15/17)

[Editorial] Asian carp report reinforces need for greater federal investments in Great Lakes protections (8/14/17)

**Congressional**

**House to tee up spending bills when recess ends (8/16/17)**

When the House reconvenes next month, it will immediately consider a broad package of fiscal 2018 domestic spending bills, including the measure funding U.S. EPA and the Interior Department, Republican leaders signaled today.

**H.R.1807 - Public Water Supply Invasive Species Compliance Act of 2017 (115th Congress)**

Introduced by [Rep. Louie Gohmert](https://www.congress.gov/congressionalLeadership/RepLouieGohmert). This bill amends the Lacey Act and the Lacey Act Amendments of 1981 by exempting certain water transfers between public water supplies located on, along, or across the boundaries of Texas, Arkansas, and Louisiana from prohibitions on illegal trade of plants and wildlife. Specifically, the prohibitions do not apply to covered water transfers containing a prohibited species if: (1) the species are present in both public water supplies before the transfer and the water is transferred directly between them; or (2) the water is transferred in a closed conveyance system (a closed system that collects, contains, and transports the flow of water, such as pipe systems) and sent directly to treatment facilities where the species will be destroyed.

**Latest Action:** 08/25/2017 Placed on the Union Calendar, Calendar No. 198.

**TRAININGS, WEBINARS, CONFERENCES AND MEETINGS**

**Results:** [Best Management Practices for Marinas, Marine Repair Shops, Boat Brokers & Boaters](https://www.iscbc.ca/webinars-training) (8/26/17)

The ISCBC and the BC Ministry of Environment are pleased to present a new best practices document for the boating industry on preventing the spread of aquatic invasive species. It was developed after an extensive review of existing publications, and direct consultation with boating industry stakeholders across BC during five workshops held in April.

**Events: Webinars, Trainings, Conferences and Meetings**

**SEPTEMBER**

**Return to top**
**Watercraft Inspection and Decontamination Training - WIT II**  
Fall 2017 / Spring 2018

**EMAPI 2017 - 14th International Conference on Ecology and Management of Alien Plant Invasions: Syntheses, challenges and new opportunities** (link is external)  
Date: Sep 04, 2017 to Sep 08, 2017, Location: Lisbon, Portugal.

**Western Regional Panel on Aquatic Nuisance Species:** September 13-15, 2017 – San Diego, CA  
The WRP will hold their 2017 Annual Meeting in San Diego, CA on September 13-15 at the Horton Grand Hotel. California Department of Fish and Wildlife and California State Lands Commission host the meeting. **Register here**

“**What is the State of our Pacific Northwest Unionids?**” at the Columbia Gorge Discovery Center, The Dalles, OR, September 19th-20th, 2017. Hosted by EcoAnalysts, Inc., this two-day event is focused on the biology, ecology, cultural significance, and conservation of freshwater mussels in the Pacific Northwest. The workshop will include lectures on freshwater mussels, presentations of local mussel work, and a panel discussion chaired by local experts to answer questions and lead discussion. The workshop will also include a special seminar on mussel survey methods taught by Heidi Dunn of Ecological Specialists, Inc., including a day-long field demonstration of mussel habitats and survey methods. **Register here**

The **California State Lands Commission’s Marine Invasive Species Program** will be hosting a series of outreach events to provide updates for new and upcoming regulations, including the Article 4.8 Biofouling Management Regulations to Minimize the Transfer of Nonindigenous Species from Vessels Arriving at a California Port. These outreach events will include:
- Online Webinar (meeting link will be sent to those who RSVP)  
  Wednesday, September 20, 2017, from 1:00 PM– 2:00 PM  
- Southern California Customer Service Meeting  
  Tuesday, September 19, 2017, from 10:00 AM – 12:00 PM in Long Beach  
- Northern California Customer Service Meeting  
  Tuesday, September 26, 2017, from 10:00 AM – 12:00 PM in Martinez  
Please RSVP for these events via email to CSLC.MEPDMISP@slc.ca.gov by September 15, 2017, and please indicate the specific event(s) for which you would like to register.

**Oregon Invasive Species Council Meeting – Clackamas ODFW Field Office, OR September 20**

**Washington Invasive Species Council Meeting**  
September 21, 2017 Olympia, **Natural Resources Building** Room 172


**18th Ballast Water Management Summit will be held in Singapore on 27-28 September 2017.**  
The event will provide essential, expert guidance to shipowner/operators on how to prepare for
and manage the BWT Systems in terms of selection, installation and technical operations, as well as advice on compliance, PSC and regulation once the convention is in place. The conference will also address Type Approval and system excellences for the BWT System Manufacturers.

OCTOBER

**International Conference on Aquatic Invasive Species (ICAIS) - October 22-26, 2017 – Fort Lauderdale, Florida:** Early Registration (*before September 1, 2017*). Preliminary program available [here](#).

NOVEMBER

**State of Lake Michigan (SOLM) Conference** is Nov. 6-10 at the Hyatt Regency in Green Bay, Wisconsin. An informal opening reception will be held on the evening of Nov. 6, all workshops and presentations will be Nov. 7-10, with the conference ending midday on Friday, Nov. 10.


The next meeting of the 100th Meridian Initiative - [Columbia River Basin Team](#) is scheduled for Tuesday and Wednesday, November 28 & 29, 2017 in Portland, Oregon. Further details will be send out on this list serve in the next few weeks.

DECEMBER

**Oregon Invasive Species Council Meeting – Salem, OR December 6th**

**Innovations in Invasive Species Management Conference:** We invite you to join us for the first Innovations in Invasive Species Management Conference and Workshop to be held in Nashville, TN December 13-15th, 2017 at the Gaylord Opryland Hotel.

**Washington Invasive Species Council Meeting** December 14, 2017 Olympia, [Natural Resources Building](#) Room 172.

JANUARY

**Midwest Fish and Wildlife Conference** January 28-31, 2018 in Milwaukee, Wisconsin. The theme of the meeting is "Strengthening Natural Resources Through Collaboration."

FEBRUARY

Invasive Species Council of BC: Annual Public Forum & AGM. [INVASIVES 2018](#) is taking place Feb 6 - 8, 2018 at the Pacific Gateway Hotel in Richmond BC.

MARCH

[Return to top](#)
**National Shellfisheries Association 110th Annual Meeting**, March 18-22, 2018. Renaissance Hotel, Seattle Washington, USA. Special European Green Crab Session. **Call for abstracts due December 17, 2017.** Contact: Sylvia Yamada yamadas@science.oregonstate.edu or Thomas Therriault, thomas.therriault@dfo-mpo.gc.ca

**APRIL**


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