## WDFW - European Green Crab Update

Public Update on European Green Crab Management - Jan/Feb 2023



WDFW field staff staging traps and equipment for European green crab removal on the Washington Coast.

**Report Purpose:** These regular updates are intended to inform the public, local stakeholders, media, and others regarding the status of European green crab (EGC) management and emergency measures deployment in Washington state, supporting the public information responsibilities of the Incident Command System (ICS) and Public Information Officer (PIO).

For additional information, please see: <u>wdfw.wa.gov/species-habitats/invasive/carcinus-maenas</u>
European green crab news, communications and outreach materials are available under the Resources tab.

To report European green crab sightings or obtain identification resources, visit: wdfw.wa.gov/greencrab

## January/February 2023 Updates

European Green Crab Incident Command objectives continue to include reduction of EGC populations to below levels harmful to environmental, economic, or cultural resources.

This report summarizes EGC captures, monitoring, and other emergency measures from January 2023, as well as field and partner highlights from January and February. This report marks the start of a new data year. All capture/removal totals were reset to zero (0) on January 1, 2023.

Many shore based EGC trapping efforts have not begun for the 2023 season due to safety concerns from shortened daylight hours, difficulty in tidal timing, and hazardous intertidal and weather conditions. WDFW will soon begin the process of hiring seasonal technical staff to increase trapping capacity for the 2023 season. Read on for additional updates and highlights.

### 2023 European Green Crab Capture/Removal Totals

**Total 16,567** *as of January 31\** **Latest Operational Period 16,567** *(Jan. 1 to 31, 2023)* 

#### **Coastal Management Branch EGC removal totals:**

Year to date 15,585 Latest Operational Period 15,585

#### **Salish Sea Management Branch EGC removal totals:**

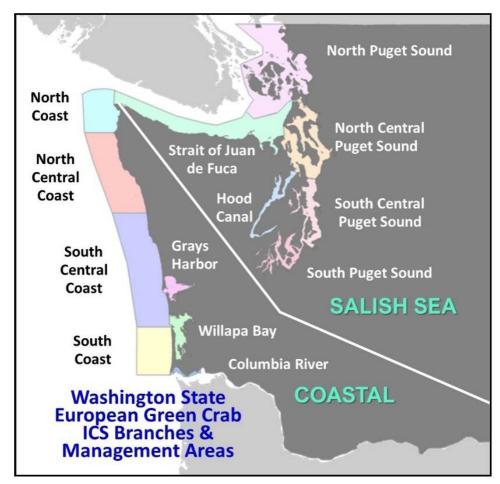
Year to date 982 Latest Operational Period 982

## 2022 European Green Crab Revised Capture/Removal Totals

Total 285,285

**Coastal Management Branch** 204,274 (revised from 205,321)

Salish Sea Management Branch 81,011



The EGC ICS Branches and Management Areas map is also <u>available as a one-page handout</u>.



Governor's 10-Day Emergency Measures Status Update (February 20, 2023): 10-Day Emergency Measures Status Update: Per RCW 77.135.090, the WDFW Director continues to evaluate the effects of the European Green Crab emergency measures as provided under Proclamation 22-02, finds that the emergency continues to persist, and advises that all emergency measures should be continued. Details of the evaluation will be provided directly to you in Situation Reports (SitReps) reflecting each Incident Command System (ICS) operational period.

## January/February News and Media Coverage Highlights

Coverage from state, local, and national outlets included:

- Sequim Gazette reported on the status of EGC on the Olympic Peninsula, highlighting the
  work done by Jamestown S'Klallam Tribe and Makah Tribe, among others:
  Invasive green crab presence remains on Olympic Peninsula
  https://www.sequimgazette.com/news/invasive-green-crab-presence-remains-on-olympic-peninsula/
- Northwest Treaty Tribes (Northwest Indian Fisheries Commission) published a blog about the Lummi Nation's year-round trapping efforts at their Sea Pond and adjacent shorelines: Fight in "brushfire mode" against invasive crab <a href="https://nwtreatytribes.org/fight-in-brushfire-mode-against-invasive-crab/">https://nwtreatytribes.org/fight-in-brushfire-mode-against-invasive-crab/</a>
- CBS affiliate KSTW interviewed EGC Public Information Officer about the confiscation of EGC at a Seattle market and the threats EGC pose to Washington resources: Department of Fish & Wildlife recently confiscated live European Green Crabs sold illegally <a href="https://www.cbsnews.com/seattle/video/department-of-fish-wildlife-recently-confiscated-live-european-green-crabs-sold-illegally/#x">https://www.cbsnews.com/seattle/video/department-of-fish-wildlife-recently-confiscated-live-european-green-crabs-sold-illegally/#x</a>
- The Cordova Times (Alaska) also covered the confiscation of EGC at a Seattle market:
   Prohibited live European green crabs confiscated in Washington
   https://www.thecordovatimes.com/2023/01/06/prohibited-live-european-green-crabs-confiscated-in-washington/
- The Astorian reprinted a guest column by Ed Johnstone, chairman of Northwest Indian Fisheries Commission originally published in June 2022, emphasizing the need for coordination and resources in mounting an effective EGC response:
   All hands on deck to slow spread of European green crab
   https://www.dailyastorian.com/opinion/columns/guest-column-all-hands-on-deck-to-slow-spread-of-european-green-crab/article c0489a3a-978c-11ed-9985-ef025d60fcca.html
- An article published in the University of Washington School of Marine and Environmental Affairs blog Currents provides a brief history of EGC in the U.S. and Washington, tips on identification, and ways that individuals can help: Raving Mad Crab https://smea.uw.edu/currents/raving-mad-crab/



- The Daily World (Grays Harbor area) published an article about the Shoalwater Bay Tribe's efforts to remove EGC from their lands near Tokeland:
   Fish and houseguests: Shoalwater Bay Tribe pushes back against green crab <a href="https://www.thedailyworld.com/news/fish-and-houseguests-shoalwater-bay-tribe-pushes-back-against-green-crab/">https://www.thedailyworld.com/news/fish-and-houseguests-shoalwater-bay-tribe-pushes-back-against-green-crab/</a>
- Washington Stormwater published a piece promoting "Molt Search," a volunteer program
  that Washington State University Extension and Washington Sea Grant (WSG) are
  launching to engage volunteers in detecting EGC molts: E&O Effort Aims to Mobilize
  Volunteers Against Invasive Species
  <a href="https://www.wastormwatercenter.org/eo-effort-aims-to-mobilize-volunteers-against-invasive-species/">https://www.wastormwatercenter.org/eo-effort-aims-to-mobilize-volunteers-against-invasive-species/</a>
- Prominent Canadian investigative blog The Narwhal reported on European green crab in British Columbia, including perspectives from First Nations and mention of emergency control measures in Washington state:

  The worst house quests: European green crabs are investing R.C. waters
  - The worst house guests: European green crabs are invading B.C. waters

    <a href="https://thenarwhal.ca/invasive-european-green-crabs/">https://thenarwhal.ca/invasive-european-green-crabs/</a>

    The Narwhal article was reprinted by other Canadian outlets including the Victoria Times

    Colonist as well as aquaculture and commercial fishing industry outlet Undercurrent News.
- KIRO7 and affiliate MyNorthwest.com covered the February 21 EGC Public Update Webinar with online and broadcast segments:
   WA preparing to protect marine life against invasive green crab
   https://mynorthwest.com/3837843/state-prepares-protect-local-marine-life-invasive-green-crab/
- Q13 Fox published broadcast and online coverage on Washington Invasive Species
   Awareness Week, including European green crabs and interview with Justin Bush of
   Washington Invasive Species Council:
   Invasive species pose serious threat to Washington state
   https://www.q13fox.com/news/invasive-species-pose-serious-threat-to-washington-state

# Partner Highlight: Jamestown S'Klallam Tribe continues trapping in Sequim and Discovery Bays

The Jamestown S'Klallam Tribe has been hard at work trapping to look for European green crabs (EGC) in the marshes of Sequim Bay, near Blyn on the Strait of Juan de Fuca, since 2017. That year, EGC were found for the first time at the Dungeness National Wildlife Refuge just to the west of Sequim Bay.



Neil Harrington, Environmental Biologist for the Jamestown S'Klallam Tribe, remembers thinking, "The refuge has the refuge to deal with, what else is out there? Are they in Sequim Bay, too?"

"We have done a lot of restoration work in Sequim Bay," said Harrington, "and we don't want to see this habitat degraded by EGC. When they were found out at Dungeness (National Wildlife Refuge), we got really nervous."

In 2017, Harrington and his team set 372 traps in the marshes at the south end of Sequim Bay adjacent to the Tribe's oyster farm and tribal center. They caught one female EGC. One crab may seem insignificant, but EGC numbers can quickly increase. In 2019, 176 EGC were trapped in Willapa Bay. By 2021, that number rose to more than 10,000.

Despite several shallow lagoons and creek mouth "<u>pocket estuaries</u>" that provide the sheltered habitat EGC often prefer, the numbers in Sequim Bay have so far remained relatively low, peaking in 2021 with 16 EGC and coming down in 2022 to just two crabs caught.

"We're hoping the numbers stay low," Harrington said, "low enough that the crabs don't impact the ecosystem."

Though Sequim Bay has been their focus, the Tribe has also started trapping in Discovery Bay. In collaboration with WDFW staff, Harrington and his team trapped heavily in Discovery Bay in 2022. Initially, they found just one crab. After setting more than 500 more traps, they found a total of 75 EGC in Discovery Bay, a larger catch than in Sequim Bay and cause for concern and continued attention this year. Washington Sea Grant's <a href="Crab Team">Crab Team</a> also operates a monitoring site in Discovery Bay and provides technical support.

In 2023, Harrington and WDFW plan to trap in Discovery Bay again in hopes of fully assessing the EGC population and getting it under control. This area is part of the EGC Incident Command System (ICS)'s Strait of Juan de Fuca Management Area, within the Salish Sea Branch. It's also important to prevent further spread of EGC into the North Central Puget Sound Management Area.

"Discovery Bay will likely be a team effort again between the Jamestown S'Klallam Tribe and WDFW," says Harrington. "WDFW will hire two technicians based in Port Townsend, which will be a really good thing for the Peninsula."

Based on experiences monitoring and removing EGC in Sequim Bay, as well as the experiences of U.S. Fish and Wildlife Service and WDFW in nearby areas, Harrington says "it is possible when you get a population low enough, to keep it low. That's my hope for Discovery Bay."

When asked what he wants people to know about EGC in waters off the Jamestown S'Klallam Tribe's lands, Harrington says, "I think we are right on the edge of the invasion. It is possible that we can hold back the tide. Discovery Bay is concerning, but I think with continued trapping it is possible to keep the numbers down."

More information about the Jamestown S'Klallam Tribe Natural Resources <u>Department is available</u> on their website.



## Field Highlight: WDFW Field Technicians use new technique to monitor for EGC on Hood Canal

Last May, volunteers with Washington Sea Grant's <u>Crab Team</u> captured the <u>first EGC in Hood Canal</u> at Nick's Lagoon near Seabeck. This is the furthest south these invasive crabs have been found in the Salish Sea.

Immediately after the detection, WSG and WDFW staff heavily trapped for EGC in the area, removing 14 European green crabs. WSG volunteers and WDFW continued to monitor the site through 2022 and early 2023 and will start up again this spring.

In addition to green crabs, the teams found very sticky mud in and around the lagoon that made it difficult to deploy and retrieve EGC traps, requiring innovative tactics.

"When we're out trapping the mud is very sticky and you can lose boots or get stuck if you're not careful," said WDFW Field Technician Kaitlyn Estep.

WDFW staff returned to Nick's Lagoon once again in Jan. 2023 to check for EGC and to try a new method for deploying and retrieving traps: inflatable floating docks large enough to carry traps and crew. Luckily, no EGC were caught, and the docks were a "success" according to Estep.

Estep and her fellow Field Technician Rachel Flannery paddled the docks out into the lagoon and used them to carry and collect the traps. The stable docks made the job much easier by allowing the technicians to float above the mud rather than wade through it.

Notably, "no one got stuck in the mud," said Flannery. This saved the team time and helped to make the trapping day a safer and more efficient experience for all.

WDFW's European green crab crews, part of the Department's <u>Aquatic Invasive Species unit</u>, will continue monitoring Hood Canal and many other areas in the Salish Sea and Washington's coastal bays, working to protect our state's environmental, economic, and cultural resources.

## **Photos and Multimedia Highlight:**

Photos of WDFW technicians and research scientist Brian Turner trapping for EGC at Nick's Lagoon in Seabeck, WA on a rainy winter day. Photos by EGC Outreach Specialist Jessica Ostfeld.









Photo of the attendees of WSG Trapper's Summit on Jan. 24, 2023, at Suquamish Clearwater Casino. Photo courtesy of WSG.



## **General Updates**

#### Letter on EGC and Prohibited invasive species to shellfish shippers, dealers

A letter from WDFW Director Kelly Susewind with the subject "Prohibited Invasive Species regulations and identification for European green crab" was sent to Washington shellfish/shellstock shippers, wholesalers, and dealers as a follow-up to the December incident involving EGC confiscated from a Seattle market. The letter is available at: <a href="https://wdfw.wa.gov/sites/default/files/2023-02/egc-letter-prohibited-invasive-species-regs-feb-2023.pdf">https://wdfw.wa.gov/sites/default/files/2023-02/egc-letter-prohibited-invasive-species-regs-feb-2023.pdf</a>

#### **Coastal EGC Local Management Grant Program**

WDFW has completed soliciting applications for \$500,000 in funding available through the Fiscal Year 2023 (FY23) Coastal Management Grant Program-European Green Crab. The \$500,000 has been fully allotted as of Feb. 13, 2023. More information is available at: <a href="https://wdfw.wa.gov/sites/default/files/2022-07/Green%20Crab%20RFP-Statement%20of%20Work%20FY23%207-1-22.pdf">https://wdfw.wa.gov/sites/default/files/2022-07/Green%20Crab%20RFP-Statement%20of%20Work%20FY23%207-1-22.pdf</a>

WDFW is working with grantees on needs for future funding and starting to help craft budgets and review projects for the next round of funding expected July 1, 2023.

#### Statewide EGC Emergency Measures Interagency Funds Program

The Washington State Recreation and Conservation Office (RCO) is soliciting proposals for a total of \$1,100,000 in interagency agreement funding to support response to the European green crab emergency. \$0 remains available as of February 2. More information is available at: <a href="https://rco.wa.gov/about-us/employment-and-contracts/">https://rco.wa.gov/about-us/employment-and-contracts/</a> or <a href="https://rco.wa.gov/wp-content/uploads/2022/08/Solicitation EuropeanGreenCrabFunding.pdf">https://rco.wa.gov/wp-content/uploads/2022/08/Solicitation EuropeanGreenCrabFunding.pdf</a>

#### Fiscal Year 2023-2025 Biennium Budget (July 1, 2023 to June 30, 2025)

WDFW EGC funding received from the legislature in this biennium is ongoing for the 2023-2025 biennium. WDFW did not propose agency-request legislative EGC funding for the 2023-25 biennium. The Governor's budget includes the ongoing \$6,082,000 in proviso funding. WDFW continues to assess options for adjusting dispersal based on availability of alternative funding sources and any changes to EGC emergency management priority and resource needs. WDFW is soliciting budget/funding feedback from tribal co-managers and through entity representatives of the EGC Multi-Agency Coordination (MAC) Group.

#### **European Green Crab Multi-Agency Coordination Group**

The European Green Crab (EGC) Multi-Agency Coordination Group (MAC Group) met virtually on Jan. 18 and again on Feb. 15. The MAC group members discussed MAC group representation and gaps were identified, notably participation from the shellfish industry. The Department of Fisheries and Oceans Canada was added as a MAC group member. Budget was discussed, and presentations were given on the status of the Coastal EGC Local Management Grant Program and Statewide EGC Emergency Measures Interagency Funds Program. The FY23 European Green Crab State Action Plan was reviewed by the group and finalized.



#### **EGC Hub Microsite**

WDFW is developing an online data reporting application and EGC Hub "microsite" with Esri contractor. The data reporting application seeks to streamline EGC data acquisition and management actions. The EGC Hub will have both internal and external interfaces and functions for partners and the public, including data submission, operations support, public awareness resources, story maps, and a map showing EGC detections and management efforts in Washington. Co-managers and partners interested in using the apps and accessing the collaborative management side of the Hub are encouraged to reach out to the EGC Team at <a href="mais@dfw.wa.gov">ais@dfw.wa.gov</a> to get started.

#### Communications, outreach, and community events

WDFW's European Green Crab Outreach Specialist Jessica Ostfeld continued ramping up public engagement and community outreach efforts, coordinating with the Public Information Officer (Chase Gunnell) and ICS/AIS staff to support EGC awareness, education, reporting and events.

WDFW AIS and Communications staff tabled at Storming the Sound in La Connor on Jan. 19, Illuminight at Skagit River Walk Park on Jan. 27, and the Seattle Boat Show at Lumen Field Event Center Feb. 3 – 11. Staff talked with more than 900 people about EGC, passing out signs, fliers, and other outreach materials. EGC reporting signs were also distributed to industry and attendees.

WDFW provided an EGC Public Update Webinar during Washington Invasive Species Awareness Week on Feb. 21, coordinated by the Recreation and Conservation Office. A recording of the webinar will be posted to the European green crab <u>YouTube playlist</u>.

WDFW deployed new outreach materials for 2023, including an <u>EGC identification graphic</u>, <u>identification outreach sign</u>, <u>plain language talking points</u>, and partner recognition sign. Signs, outreach materials, and other resources were shared with county conservation districts, tribes, marinas, boat launches and water access areas, shellfish growers, and other partner groups. More than 1,000 stickers and 150 reporting signs were distributed in January and February.

Please contact WDFW's EGC Outreach Specialist <u>jessica.ostfeld@dfw.wa.gov</u> to request signs, stickers, or materials, or to request attendance at events or outreach opportunities. Copies are available at: https://wdfw.wa.gov/species-habitats/invasive/carcinus-maenas#resources

#### Co-manager and partner coordination

On Jan. 24, Washington Sea Grant hosted the EGC Trapper's Summit at Suquamish Clearwater Casino. The summit focused on co-managers and partners that actively trapped EGC in 2022. At the summit, participants had the opportunity to share observations, learn what other trappers saw in 2022 and are planning for 2023, collaboratively explore the data that trappers have been individually pulling together, build on each other's technical knowledge of trapping, and identify questions and priorities that might help inform future trapping efforts.

WDFW hosted the annual Washington EGC Co-Managers and Partners Meeting on February 1, 2023. Participants could join an in-person meeting at the Lacey Community Center or online. Presentations were given on the status of EGC in Washington state, management plans for 2023, communications and outreach efforts by WDFW, and permitting processes and requirements.



## **Public Reporting and Crab Identification**

WDFW continues to receive reports from the public of native crab species misidentified for invasive European green crabs. While we appreciate the public interest in helping to identify invasive species, these incidents are examples of why WDFW calls on the public to photograph and report suspected green crabs at: wdfw.wa.gov/greencrab, returning the crab in question unharmed to the water where it was found. Most of these native crabs, including Graceful, Kelp, and Hairy shore crabs, are regulated as Unclassified Marine Invertebrates and are illegal to kill, harvest, retain, or possess. If verified as European green crabs, WDFW will follow up with trapping and monitoring if found in a new area.

Crab identification guides and resources are also available on that <u>webpage</u>, as well as a flier at: https://wdfw.wa.gov/sites/default/files/2022-06/European green crab reporting sign 2022.jpg

European green crabs are shore crabs and are found in shallow areas—typically less than 25 feet of water—including estuaries, mudflats, intertidal zones, and beaches. They are not likely to be caught by recreational shrimpers or crabbers operating in deeper water, but may be encountered by beachgoers, waders, clam and oyster harvesters, or those crabbing off docks or piers in shallow areas.

Beachgoers, anglers, recreational crabbers, and others are asked not to tamper with European green crab traps, which are often deployed in shallow areas exposed at low tide and are typically identified with a bright orange buoy and an official tag or permit.

## **Summary Statement for Background**

On January 19, 2022, Washington State Governor Inslee issued Emergency Proclamation 22-02 which ordered the Washington Department of Fish and Wildlife (WDFW) "to begin implementation of emergency measures as necessary to effect the eradication of or to prevent the permanent establishment and expansion of European green crab." This is a statewide proclamation for all marine and estuarine waters of the state that to be effective, will require coordination across state, tribal, and federal jurisdictions. To address this large and complex task, WDFW has implemented an Incident Command System (ICS) structure to facilitate a statewide European green crab (EGC) management strategy. The state Emergency Management Division has assigned this as Mission #22-1085. Since this is a relatively slower-moving emergency (as compared to earthquake or wildfire response), the ICS structure will be used as the overall framework for WDFW communications and coordination.

###

#### Public updates on European Green Crab Management are posted at:

https://wdfw.wa.gov/species-habitats/invasive/carcinus-maenas

For more information or for media inquiries, please contact the European Green Crab Public Information Officer at <a href="mailto:chase.gunnell@dfw.wa.gov">chase.gunnell@dfw.wa.gov</a> or contact <a href="mailto:ais@dfw.wa.gov">ais@dfw.wa.gov</a>.

Published February 28, 2023

