

## **WDFW 2020 Shellfish Import Approval Requirements:**

- For applicants who have not previously been approved for import of marine invertebrates, see WAC 220-370-200.
- Requirements outlined below apply to all renewal applications to import live shellfish for aquaculture purposes.

## General requirements (all species):

For import of shellfish larvae, seed or broodstock into Washington for hatchery production and aquatic farming:

- WDFW requires valid infectious shellfish disease agent testing ("health certifications") as a tool to evaluate low risk for introducing shellfish pathogens. Test results must demonstrate low risk (no presence detected) or detection below acceptable threshold limits;
- Hatchery operators must provide annual health certifications for source broodstock utilized for production;
- Hatchery operators must provide annual health certifications of representative samples of the larvae, seed or broodstock to be imported;
- Secondary seed producers, i.e. FLUPSY or nursery operators, which utilize larvae or seed acquired from hatchery sources, must provide a current broodstock health certifications for the larvae or seed source;
- Certifications are valid for 12 months; applicants may be given a grace period of up to 60 days
  with prior arrangement from WDFW in limited instances (e.g. where animals for testing are
  unavailable, or where a seasonal testing window is required by WDFW that supports an
  extension);
- Certifications must be provided by a WDFW-approved pathologist or laboratory;
- Production of species native to Washington must utilize 100% Washington-sourced wild broodstock which have been <u>previously approved</u> by WDFW;
- Imported invertebrates are subject to all additional conditions of permit (issued with permit).

## **Disease Screening Sample Sizes (n):**

- Minimum sample and screening precision requirements target 95% confidence level of detecting a minimum pathogen prevalence of 5% (sample size n=60).
- Sampling size where WDFW determines there is increased risk may be increased to 95% confidence of detecting a specific pathogen minimum prevalence of 2% (sample size n=175).
- Samples must be representative of source broodstocks and life stages to be imported.
- Histological examination for pathogens: n=60 live adults, juveniles, seed or larvae.
- PCR examination for specific pathogens: n=60 live adults, juveniles, seed or larvae.
- Other examination methods require prior approval from WDFW.

# Special requirements (all locations/all species):

Additional sampling, increased sample sizes and testing may be required based upon detection
of a disease of concern, reported mortality, movements of products deemed of high risk or
other events or actions within the West Coast Commerce Region and Hawaii that WDFW deems
to pose a risk of disease introduction. These may be in addition to the general requirements and
sample sizes listed above, and may include multiple locations.

## **Disease Screening Requirements by Species:**

**Table 1.** WDFW requirements for species-specific screening requirements.

Species	Histology	PCR	
Crassostrea species (all)	Yes	OsHV-1 (Calif. & microvariant)	
Crassostrea sikamea (Kumamoto oyster)	Yes	Mikrocytos mackini (broodstock only)	
Crassostrea virginica (Eastern oyster)	Yes	Perkinsus spp.	Haplosporidium spp.
Mytilus mussels (all)	Yes	Marteilia refringens	
Manila clams (V. philippinarum)	Yes	Perkinsus spp.	
Geoduck ( <i>P. generosa</i> )	Yes		
All other permissible* bivalve species	Yes	Additional requirements may apply	

<sup>\*</sup>Established species from existing import areas of known health status; See WAC 220-370-200 and 220-370-050

#### Additional disease (pathogen)-specific requirements

• Imports of *Crassostrea* oysters with screening results indicating prevalence levels of *Mykrocytos mackini* (Denman Island Disease) of higher than 10% will not be permitted, except into WDFW-approved isolation or quarantine facilities; additional import conditions will apply (Table 2).

## **Sampling Timing Requirements:**

- Sampling for histological examinations and PCR for specific pathogens other than *Mikrocytos* mackini PCR must occur between May 1 and September 30 of each year.
- Specific to Kumamoto oyster importations, sampling of oysters (broodstock) for *Mikrocytos* mackini infection must use PCR and must occur between December 1 and April 30 of each year.

#### Import Requirements by State, Province or Region:

Only species and source areas listed are approved for import of live invertebrates (non-market ready¹) into Washington, except that some additional species/locations may qualify for import into WDFW-approved quarantine only.

<sup>&</sup>lt;sup>1</sup> See definitions, WAC 220-370-050; WDFW consider "market-ready" to mean non-living, packaged invertebrates not-intended for contact with state waters; controls to prevent living invertebrates destined for the marketplace will be evaluated on a case-by-case basis. Living invertebrates residing in the marketplace are not to come into contact with state waters.

**Table 2.** WDFW import requirements by jurisdiction.

State	Areas approved	Species approved	Additional Restrictions	
Note: only species and areas listed are permissible for imports*				
Alaska	Craig Kake Kachemak Bay Ketchikan Seward	C. gigas (Pacific oyster)		
British Columbia	Closed facilities only**	C. gigas (Pacific oyster) P. generosa (Geoduck)	<ul> <li>All seed/larvae must be progeny of WDFW- approved, disease-free wild broodstock of Washington origin; additional broodstock requirements may apply as condition of permit.</li> </ul>	
California	Humboldt Bay	C. gigas (Pacific oyster) C. sikamea (Kumamoto oyster) R. philippinarum (Manila clam)	<ul> <li>Kumamoto oysters: import allowed April 1 – Nov 1 only (both adults and seed)</li> </ul>	
Hawaii	Hilo (closed facility) NEHLA (closed facility)	C. gigas (Pacific oyster) C. virginica (Eastern oyster)*** C. sikamea (Kumamoto oyster) R. philippinarum (Manila clam)		
Oregon	Netarts Bay Tillamook Bay Yaquina Bay	C. gigas (Pacific oyster) C. sikamea (Kumamoto oyster) M. galloprovincialis (Mediterranean mussels) P. generosa (geoduck) R. philippinarum (Manila clam)	Kumamoto oysters: import allowed April 1 – Nov 1 only (both adults and seed)	

<sup>\*</sup>Species and areas not listed are not currently permissible for imports to Washington.

<sup>\*\*</sup>Closed facilities must be approved by WDFW and be designed to prevent co-mingling with other non-approved species, with invertebrates from non-approved source locations, with outside waters, or with water from containers holding non-approved invertebrates. Additional conditions may apply.

<sup>\*\*\*</sup> Broodstock for production of C. virginica must be pre-approved by WDFW.