**Washington State Department of Health Marine Biotoxin Records**

**Questions should be directed to:**

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* Management Plan Folder: Contains the Washington State Department of Health General Marine Biotoxin Contingency Plan and current appendixes for razor clams and Dungeness crab.

*Note: In order to upgrade an area, two samples collected at least 7 days apart under the action level and toxins not increasing required. Areas may not be reopened due to risk or inadequate sampling at discretion of SME.*

* Closure Zone Maps folder contains maps for coastal closure zones. Most sentinel mussel monitoring sites are marked.
* Grid Codes: File contains approximate coordinates for sampling sites. If any sites are missing please let me know and we will remedy. This may be supplement for razor clams by the ‘Coastal Razor Clam Areas’ .pdf in the Razor Clam Plan folder within the Management Plan folder.
* Coast Biotoxin Records 2000\_2020: File contains all biotoxin results for shellfish testing for years 2000-2020. ASP, DSP, PSP toxin data is included. LOD for PSP 38, ASP & DSP 1. Closure levels: PSP 80 ug/100 g tissue, ASP 20 ppm, DSP 16 ug/100 g tissue.

*Note: All closures are included in the internal automated log and excel rec closure log. The Shellview CloseLog is not available prior to year 2014.*

* Shellview\_CloseLog\_2014\_2020: Internal Shellfish Safety/Shellview records. ParentEntity shows type of closure zone, ie: commercial area, zone, county, used to show areal extent of closure. Commercial closures are for particular species based on enhanced monitoring of a particular species. More than 2 toxic species will trigger all species commercial closures. ParentEntityNames w/o numbers are waterbodies or growing areas. Numbers indicate that a closure zone was used. Geoduck Tract Numbers are subtidal geoduck commercial harvest areas. Some notes of toxins/reasons for closures. Event type notes commercial or recreational closure. Additional data may be obtained from Rec Closure logs.
* Rec Closure logs: Documentation of recreational shellfish closures by county. Sample site notes location of first sample taken above action. Closure area is water body or extent of closure. Closure history notes species closure and date closed. Typical closure progression: all species closed > butter/varnish closed > reopen to all species.
  + Recreational harvest of scallops always prohibited.
  + Closed to all species: all bivalve species and moon snails (not shrimp/crab). Implemented when new closure/expanded closure occurs and active algal bloom.
  + Reopen to all species, except butter clams (sometimes geoduck if opportunity exists in intertidal): upgrade from all species closure. Bloom subsided. Butter and varnish clams retain toxins longer than other species.
  + Reopen to all species: Upgrade. No butter/varnish/geoducks present and bloom has subsided.
  + Closed to all crab species: Has only been used in 2020.

Seasonal Closures of all coastal beaches with the exception of razor clams are due to lack of adequate sampling for logistic reasons: Grays Harbor, Pacific, Jefferson and Clallam Coasts. CNS (subsistence) harvests are permitted at the discretion of tribal entities in coastal areas. Coastal razor clam closure in March 2020 due to COVID crowding concerns of county officials, not biotoxins. Coastal ASP closures began in October.

*Rec Closure log 2020 included Closure Zone numbers used to update shellfish safety map.*