

**EASTERN STRAIT OF JUAN DE FUCA REGION  
HARVEST MANAGEMENT PLAN FOR  
THE SUBTIDAL GEODUCK CLAM (*Panopea abrupta*) FISHERY  
2005-2006**

**1. Parties To This Plan**

The parties to this plan are the signatories to the plan.

**2. Region Covered by This Plan**

This Harvest Plan encompasses the subtidal lands of the Eastern Strait of Juan de Fuca Management Region described as those waters east of a line projected true north from Observatory Point to the international boundary line; and those waters west and south of a line projected from Point Wilson to Partridge Point, Whidbey Island, then westerly to the vessel traffic service buoy "S", north of Dungeness Spit, then north to the vessel traffic service buoy "R", then due west to the international boundary line, then westerly along the international boundary line to a point where the international boundary line intersects the line projected from Observatory Point.

**3. Term**

This Plan supercedes provisions in all previous geoduck harvest management agreements between the state and Treaty Tribes for the Eastern Strait of Juan de Fuca Geoduck Management Region. The term of this Plan is from April 1, 2005 to March 31, 2006. This Plan may be terminated by any party by giving thirty (30) days written notice to all parties to this Plan. This Plan is limited to the time and matters expressly stated herein.

**4. Purpose of Plan**

This Harvest Management Plan is intended to be consistent with paragraph 4.5 of the *United States v. Washington*, 898 F. supp. 1453 (W.D. Wash. 1995), as amended by the Stipulation and Order Amending Shellfish Implementation Plan, dated April 8, 2002, (hereafter "Implementation Order"). The purpose of this Plan is to establish guidelines and general provisions governing management and harvest of geoduck clams (*Panopea abrupta*) in the Strait of Juan de Fuca Geoduck region (Figure 1). The parties agree to a philosophy of cooperative management in developing and implementing the subtidal geoduck clam fishery. The objectives of this Plan are to provide sustainable harvest of geoduck resources consistent with the best available scientific information, protect public health, protect habitat required to sustain geoducks, minimize the impacts of harvest on the ecosystem, provide a controlled and orderly fishery and achieve the allocation objectives established in the Revised Implementation Order, and provide compliance and enforcement programs to achieve these objectives.

This Plan is intended to ensure that treaty Indian and State fishers subject to their respective regulatory authorities shall be accorded the opportunity to harvest their shares of geoduck as determined by the court in this case, provided, however, that express provisions of this Plan shall control over general provisions of applicable court orders.

This Plan shall not affect nor be considered by any person, party, or court to affect the continuing jurisdiction of the United States District Court for the Western District over all issues and matters

within the jurisdiction of that court pursuant to the rulings in *United States v. Washington*. The parties agree they remain bound by §1.6 of the Revised Implementation Order, continuing the implementation of the Shellfish Sanitation Consent Decree (May 4, 1994).

By entering into this Plan, no party waives any rights under the orders of the court in this matter, except as expressly stated herein.

#### **5. No Waiver or Admission of Usual and Accustomed Areas**

No party hereto waives any claims concerning the location, boundaries, scope, or use of usual and accustomed grounds and stations (hereafter "fishing areas"). This Plan does not constitute an admission that a particular area used for management is an accurate description of Usual and Accustomed fishing areas, their location, boundaries, scope or use. The terms of this Plan shall not be used as evidence in any Tribal, State, or Federal Court of administrative or quasi judicial proceeding concerning the location, boundaries, scope or use of Usual and Accustomed fishing areas.

#### **6. Equal Opportunity Shall Govern Harvest**

The State and Tribal harvest opportunity shall be equal and acceptable in terms of geoduck quality, value, ease of digging, density, access, and interference or interruption from other uses. The parties acknowledge that principles of equal opportunity may require evaluation of intangible factors, including the ability to obtain the benefit of first access to unharvested areas and preserving equal harvesting opportunities in the future.

Where appropriate, individual tracts that are designated for harvest may be divided to preserve present and future harvesting opportunities. The parties recognize the need to maintain complete and valid resource surveys in order to provide future harvest opportunities. The parties recognize the responsibility of both the state and treaty tribes to conduct resource surveys (according to WDFW Technical Report #FPT00-01; Stock Assessment of Sub-tidal Geoduck Clams, *Panopea abrupta*, in Washington), unless otherwise agreed by all parties.

#### **7. Accommodation of Multiple Tribal Usual and Accustomed Fishing Areas Within the Region and Constraints Faced by the State**

The parties recognize that individual Tribes may be restricted in their access to a portion of the geoduck resource within the region due to geographic limitations of their Usual and Accustomed fishing areas. The parties also recognize that the State's access to geoduck resources within the region is affected by various factors including statewide management planning and local government permitting processes. The parties shall harvest geoducks such that the harvest will not, over time, disproportionately concentrate impact in any one portion of the region or otherwise cause substantial impact to another party's rights. The intent of the parties is to harvest a tract to at least 65% of pre-harvest biomass (35% of pre-fishing biomass remaining) or to a density of less than 0.04 geoduck/ft<sup>2</sup> before moving to a new tract. This may also affect the goal of proportional harvest.

#### **8. Risk Of Rights by Other Tribes**

If a Tribe not party to this plan has rights to harvest in this region, then any amount actually taken during the term of this plan by that Tribe in this region shall count against the tribal share.

## **9. Notice of Harvesting**

The State and Tribes shall regulate their respective geoduck fisheries to comply with all provisions of this Plan. State geoduck fishing will be conducted under WDFW regulations RCW75.24.100, WAC 220-52-019, WAC 220-52-01901, WAC 220-20-026; WAC 220-56-31, WAC 220-56-340, and WAC 220-56-355; provisions in the Puget Sound Commercial Geoduck Fishery Management Plan and Environmental Impact Statement (2001 or the most recent version available); and sales of valuable materials contracts issued by the WDNR. Tribal geoduck fisheries shall occur by Tribal regulation or notice of harvest pursuant to regulations.

All commercial and subsistence harvests shall be preceded by written State notice or Tribal regulation to the persons designated below or as otherwise agreed. Notice shall be delivered by mail, facsimile or other agreed to electronic communications at least three (3) working days prior to a harvest pursuant to this Plan. If notifications are delivered more than ten (10) working days prior to a harvest, then a second notice, consisting of the expected fishery start date and referencing the appropriate regulation or primary notice, will be delivered by facsimile or e-mail not more than ten working days prior to the harvest. All notices or regulations shall include at a minimum the following provisions:

- \* Fishery type
- \* Harvest date and hours
- \* Gear type
- \* Catch reporting requirements
- \* Specific harvest site
- \* Designated off-load site
- \* Harvest limits
- \* Expected Harvest Effort

A list of organizations to receive this notice is included in Appendix D.

## **10. Enforcement**

Each party shall adopt, prior to any harvest, regulations that carry into effect this Plan. Conditions of such Tribal and State harvest regulations, and DNR harvest contracts, will be enforced according to the authority of the respective party. All aspects of harvest will be subject to enforcement including off-tract harvest. In addition, enforcement programs will include, at a minimum, establishment and maintenance of tract boundaries, on-site and under water monitoring during harvest operations, and harvest accounting. Each party will ensure that all geoduck clam harvesting activity occurs only within tracts listed in this management plan and opened by valid regulation (or notice of harvest, if applicable). Any person who delivers, or knowingly allows delivery of geoducks taken from tracts not opened under provisions of this Plan or other State/Tribal Plan shall be subject to the respective party's regulatory actions and authority.

Primary enforcement vessels should be equipped at all times with a properly functioning GPS unit and a fathometer. If one party has information that another party is violating the terms of this Plan, it shall immediately notify the appropriate party(ies) in the Eastern Strait Region. Notice of the alleged violation shall consist of a verbal and written report to the appropriate party(ies) and the violating party (see Appendix D for enforcement contacts). The party allegedly violating the terms of the Plan shall then take meaningful steps to investigate the alleged violation and assure that the violation is rectified, and that harvest comes into compliance. A tract may require an in-season assessment to quantify suspected unreported harvesting. Any divers or contractors found guilty of violations shall

be subject to the enforcement penalties of their respective party. The State and affected Treaty Tribes shall meet at least once to resolve violation disputes. Disputes that cannot be resolved in this manner will be referred to formal dispute resolution (Section 26).

The Tribal and State Parties will coordinate on-site visits to observe each others monitoring programs as described in Section 23 of this Plan. DNR will take the lead to coordinate this joint effort during the term of this Plan.

### **11. Harvest Shall Occur Where Adequate Survey Data Exists**

In order for a geoduck tract to be harvested, the area shall first be surveyed to determine the geoduck biomass available on the tract. Only tracts that have current (within 8 years) surveys can be opened for initial harvest unless otherwise agreed. All affected parties shall be notified if surveys are to be conducted in the region. Surveys will be conducted according to the methodology described in WDFW Technical Report #FPT00-01; Stock Assessment of Sub-tidal Geoduck Clams, *Panopea abrupta*, in Washington, unless otherwise agreed. Based on available resources during the 2005-06 season, the parties to this Plan intend to complete a pre-harvest survey on a portion of the Siebert Creek tract (#00300) that was not surveyed in 1996.

### **12. Recovery Study**

Throughout Puget Sound specific geoduck beds, which have been fished down, are included in a long-term recovery study. The purpose of this study is to empirically verify changes in geoduck density (recovery) following fishing events. A series of post-fishing surveys are conducted to determine rates of recovery. Once the mean pre-fishing density is reached on a given bed, based on jointly agree-to criteria (Section 13) the bed will be eligible for commercial harvest. Geoduck tracts that are included in the recovery study will not be harvested by any party to this Plan during this management period.

For the Strait of Juan de Fuca Region, a recovery study will be started on the following two tracts if adequate resources are available to the parties to this Plan:

<u>Tract Name</u>	<u>Tract Number</u>	<u>Pre-Fishing Density</u> <u>(geoduck/ft<sup>2</sup>)</u>
Jamestown 2	00500	0.07
Middle Point	01700	0.07

### **13. Tracts Will be Fished Down and Managed for Recovery**

The parties agree to a harvest management strategy that minimizes the number of tracts open in any one year in the region. This strategy provides for optimal survival and recruitment of the unfished tracts. Harvesting an unlimited number of tracts in the region in any one year, or harvesting the same tract for many years, could negatively impact the geoduck resource. In order to minimize the number of new tracts open each year in the region the parties agree to the following process.

Once a tract or a portion of a tract (described to all parties prior to fishing) is opened for fishing, the area will be harvested on a continuous basis until the parties agree the area has been adequately fished down. The minimum fished-down level will be defined as either a percentage of the original biomass, or a density estimate that must be achieved prior to closing the tract. These quantities will be calculated by subtracting the amount harvested from the pre-fishing biomass estimate. The minimum fished down level will initially be set at 65% of the original biomass, or 0.04 geoduck/ft<sup>2</sup>,

and may be subject to annual adjustment by agreement of the parties. When the area has been fished down, that area will be placed in recovery status (even though the bed may not be formally in the recovery study). Tracts placed in recovery status may not be fished again until the pre-fishing and subsequent survey densities are not statistically different at the 95% confidence level using an appropriate *t*-test.

#### **14. Harvests In Less Than -18 ft. MLLW And Greater Than -70 ft.**

Currently, portions of geoduck tracts that lie either in areas less than -18 ft. or in areas greater than -70 ft., are not included in the harvestable biomass (see Section 20). The parties reserve the right to incorporate these areas into the harvestable biomass on a tract specific basis, and establish tract specific harvest quotas, as long as they are surveyed and opened to harvest based on biologically appropriate criteria. Any such harvest shall be conducted so as to limit the impact to the geoduck resource and protect eelgrass beds and other critical habitat and resources.

#### **15. National Shellfish Sanitation Program (NSSP) Compliance**

Geoducks shall only be commercially harvested in tracts certified by the Washington Department of Health in accordance with the Shellfish Sanitation Consent Decree in *United States v. Washington*, Case No. 9213, sub-proceeding 89-3 (W.D.Wa., May 4, 1994).

#### **16. Harvest Areas Shall be Marked**

An area shall not be open at any time for harvest unless the boundaries are accurately described and marked. An area opened for harvesting shall be set apart and marked at all times, with easily identifiable stakes and buoys, by the party regulating the harvest. The area shall be marked sufficiently to assure compliance with this Plan, and to allow meaningful compliance with all regulations of the party opening the area for harvest. The shallow water and deep water corners of the tract should be marked with buoys of the same color, and the shoreward boundary of the tract should be marked with buoys of a different color. If marking the boundaries is impractical, the parties may agree on an alternate marking and/or enforcement strategy, on a case-by-case basis, to prevent harvest in prohibited areas. A majority of tracts in the Strait are located well off shore, are isolated from other tracts, have deep shoreward boundaries, and are subjected to strong tidal currents (ex. Siebert Creek, Protection Island, Freshwater Bay). For these areas, the parties have agreed to exempt the need for deepwater buoys, relying instead on the harvest monitor to check the position of each harvest vessel in relation to the tract boundary description and shallow tract markers.

The latitude and longitude positions and corrected water depths of each buoy marker set on a tract must be provided to all parties, upon request. Positions will be recorded using GPS, preferably dGPS or equivalent, and North American Datum 1927 data set (which relates to NOAA navigation charts). For harvest areas of 100 acres or less, the near shore marking buoys delineating the shoreward tract boundary should be set apart no more than 500 feet. For tracts over 100 acres, the near shore marking buoys delineating the shoreward tract boundary should be set apart no more than 800 feet. Tracts with highly variable depth contours may require more than the minimum marking to adequately characterize the harvest area. Tracts in confined waterways or tracts with steeply sloping geography may require different marking, which must be agreed to by all parties. Any missing, moved or misplaced buoys will be marked at least temporarily on any given fishing day and replaced permanently within five harvest days, unless otherwise agreed by the affected parties.

No harvest shall occur in eelgrass beds or eelgrass buffer zones. Eelgrass beds and necessary buffering areas shall be determined, marked, and excluded from the designated harvest area prior to

harvest. The shoreward boundary of the tract is the -18 feet mean lower low water (MLLW) depth contour or deeper. The seaward boundary is at -70 feet uncorrected depth. On tracts where an eelgrass bed extends deeper than -16 feet (MLLW) the shoreward boundary of the tract will be two vertical feet deeper and seaward of the deepest occurrence of eelgrass. Alternatively, a buffer zone of at least 180 feet around eelgrass beds deeper than -18 feet (MLLW) can be used when the tract is marked to exclude eelgrass and marking is visible underwater to divers within the tract.

## **17. Harvest Gear and Methods**

Commercial geoduck harvest shall be conducted by divers with a hand-held, manually operated water jet. The water jet nozzle shall not exceed 5/8 inch inside diameter. Use of other gear may occur upon written agreement between the parties to this Plan. Each geoduck must be excavated individually from the bottom, and all geoducks that are excavated from the substrate during a harvest operation must be retained and the weights recorded. The practice of "side-mining" is prohibited, as is the practice of partially excavating geoducks and then replacing them back in the substrate.

## **18. No Over-harvest**

The parties shall harvest in accordance with their respective State/Tribal shares. No party shall over-harvest their planned State/Tribal shares of the regional TAC. The State and Tribal parties agree to close their respective fisheries by the time that their share of the TAC (Section 20) has been reached. Any over-harvest disputes will be resolved in a timely manner. Those that cannot be resolved by informal meetings between the parties will be referred to formal dispute resolution (Section 26). Over-harvest of respective shares by any party without agreement between the parties will result in adjustment of the next year's State or Tribal share, thus paying the over-harvest back to the resource. There shall be no claim, harvest offset, or defense to harvest based on foregone opportunity.

## **19. A Calculated Sustainable Yield Shall Dictate Harvest Amount**

The parties agree to conduct geoduck harvest based on the assumption that the Strait of Juan de Fuca Region can sustain a calculated sustainable yield each year in accordance with the procedures described in WDFW Technical Report #FPT00-01.

The method for determining the sustainable harvest rate may be changed if the parties agree that such changes are warranted. The parties shall cooperatively determine the appropriate values for model parameters and the fishery exploitation rate in order to calculate the regional sustainable yield.

The affected parties will review the status of geoduck tracts included in the harvestable biomass that were surveyed prior to 1981 and, make adjustments where necessary to change the show factor to 0.75 in order to estimate the tract biomass. For tracts less than 0.1 transects per acre, the parties to a region will review the confidence interval associated with that survey data, and jointly determine if additional survey work is needed to obtain more reliable biomass estimates.

Data will be collected during the 2005 season to determine if a more appropriate default show factor for the Straits region can be developed. A show plot developed at Siebert Cr. as well as one developed at Middle Point will be monitored at least monthly to develop a dataset of show factors throughout the active survey season (March through September). If the data indicates a more appropriate regional show factor, tract biomass adjustments will be made except where site specific show factor data is available.

Each year, prior to harvest, the parties will discuss and determine the status of each tract, or portions of tracts, to be opened for fishing in the Strait Region. The parties agree to cooperatively update the regional geoduck biomass (Appendix A) to include all new data on beds that are newly-discovered, re-surveyed, harvested, polluted, or the status of which has changed. An objective is to distribute a working draft of the geoduck biomass to all parties by February 1, allow a one-month review/comment period, and finalize the geoduck biomass by March 1 each year. All harvest and survey information through December 31 will be exchanged by each party by January 15. All harvests including commercial harvest, commercial take-home, resource assessment (surveys), research, and PSP samples will be reported and will be attributed to the respective party's share, unless otherwise agreed.

## 20. Harvest Quotas

The 2005-2006 fishery season quotas include all fishery related mortalities and are based on an annual harvest rate of 2.7% of the total harvestable biomass in the Eastern Strait Region. Unless the parties agree otherwise, tracts included in the harvestable biomass will be tracts or portions of tracts lying between -18 feet, corrected for mean lower low water (MLLW), and -70 feet in depth, and having a virgin minimum geoduck density equal to or greater than 0.04 geoduck/ft<sup>2</sup>. Other tracts not meeting this criteria may be included, assuming the parties have mutually agreed that these tracts remain part of the geoduck biomass until the geoduck density can be verified through additional data collection (see Appendix A). Tracts, or portions of tracts, that would otherwise qualify for inclusion in the harvestable biomass, may be excluded if they lie in decertified areas, or lie in areas of high vessel traffic, or have other characteristics unsuitable for commercial harvest. The 2.7 % harvest rate was recommended using the age based equilibrium yield model described in WDFW Technical Report #FPT00-01. Currently, the best available geoduck population data indicates the harvestable biomass in the Eastern Strait Region is 571,266 pounds (see Appendix A). The Tribal and State harvest quota for April 1, 2005 to March 31, 2006 fishery season in the Eastern Strait Region is 285,633 pounds each. These harvest quotas for the Tribes and for the State will be taken from the respective list of harvestable tracts identified in Section 21, unless otherwise agreed. If either party does not harvest its share during the planned harvest year, the unharvested allocations will not be carried over to the following year.

## 21. Harvest Areas

The specific Tribal and State harvest areas are listed below with their associated tract number, as designated in the 2004 WDFW Geoduck Atlas. The associated tract maps and boundary descriptions are available on the WDFD website (<http://wdfw.wa.gov/fish/shelfish/geoduck/>).

### Tribal Sites:

#### Primary

- |                      |         |
|----------------------|---------|
| 1. Protection Island | # 01000 |
| 2. Siebert Creek     | # 00300 |
| 3. Freshwater Bay    | # 00100 |

### State Sites:

#### Primary

- |                   |         |
|-------------------|---------|
| 1. Freshwater Bay | # 00100 |
|-------------------|---------|

#### Secondary

- |                  |         |
|------------------|---------|
| 1. Siebert Creek | # 00300 |
|------------------|---------|

Secondary tracts will only be opened for harvest by a party when the primary tracts of that party are unavailable for harvest. Harvest at the secondary tract will only occur during the time that the primary tract is unavailable.

Alternative sites may be added to this Plan for both the Tribal and the State fisheries if the tracts identified in the above lists are not available for harvest. No additional sites shall be selected for harvest other than those listed above except by written agreement amongst the Tribes, WDFW, and WDNR. The intent of all parties is to continue harvesting into the future on these existing tracts before opening other tracts for harvest.

## **22. Protection of Fin Fish Spawning Sites**

Finfish, particularly herring spawning populations, could be negatively impacted by geoduck harvesting. In order to protect herring populations, the parties agree to restrict geoduck harvesting in areas of known herring spawning activity. No closures are necessary to protect herring spawning populations by either the Tribes or the State during the 2005-2006 season on the tracts listed in Section 21.

The parties agree to continue discussions on the implementation of management measures that may be taken to provide additional protection to herring spawning substrates. Any agreed-to management restrictions to provide further substrate protection will be appended to and become a part of this Plan. The Tribes and the State will adjust Geoduck openings in the future if herring stock information suggests a different management action is necessary to protect the herring spawning population.

## **23. Harvest Monitoring and Catch Accounting Procedures**

The Tribes and the State shall manage their respective fisheries in such a manner that prohibits over-harvest, high-grading, and inaccurate reporting of the total catch. For purposes of this Plan, "high-grading" shall be defined as the practice of discarding or dumping geoducks at any time, resulting in excavated clams not being weighed, reported, or accounted for. The parties shall require that all geoducks that are excavated from the substrate during a harvest event shall be retained and reported as pounds of harvested geoducks. Such harvest shall be counted against that parties share, unless otherwise agreed to in writing. All commercial sales and commercial take home harvest must be reported on fish receiving tickets at the weigh out site or point of sale. Any subsistence or ceremonial harvest will be accounted for by reporting the harvest on an appropriate record keeping form, as determined by the harvesting party

All parties shall share harvest and landing reports with all other parties on a monthly basis. Monthly distribution of harvest data will occur by the 15<sup>th</sup> of each month, and will include harvest for the period from the opening of the current season's fishery through the end of the previous month. The parties may agree to a shorter time period for distribution of harvest data if conditions warrant. The Point No Point Treaty Council will be responsible for collating harvest data from all tribes in the Strait Region for distribution to all affected parties. Likewise, DNR will be responsible for summary and distribution of state geoduck harvest in Strait Region to all affected parties.

The parties recognize that there are potential sources of geoduck mortality caused by fishing activity that are not being consistently reported, including inadvertent harvest loss, intentional discarding, and unreported catch. The parties agree that fishery management programs will include known estimates of these mortality sources in total harvest estimates, or minimize the incidence of unreported



mortality through the implementation of adequate fishery monitoring and compliance programs. The parties also recognize that the actual elements of such harvest adjustments or monitoring programs will vary with the type of fishery conducted.

In the Strait Region, the parties agree to account for inadvertent harvest loss by including a loss estimate in their total reported harvest, as follows:

DNR: 2% of their Strait Region share;

PNPTC: 1% of the Strait Region harvest for each PNPTC Tribe;

Lower Elwha: 1% of their Strait Region harvest;

Suquamish, Swinomish, Tulalip: methods to account for inadvertent harvest loss will be identified and appended to this Plan in the event that either of these parties plans to conduct a fishery in the Strait Region during the Plan term.

The parties also agree to minimize the incidence of intentional discards and unreported catch through the use of specific harvesting monitoring and compliance procedures. The elements of those procedures are summarized as follows:

- 1) All geoduck fishing shall occur with a monitor, either on site or within visual distance of the tract at all times, except during operational or emergency requirements, who will not participate in the fishery or share the harvest. The duties and responsibilities of the monitor shall include accurate accounting and reporting of all geoducks harvested during fishing operations. The monitoring vessel and/or harvest vessels shall carry a calibrated scale available for weighing geoducks and geoduck cages, which will be verified for accuracy prior to each weigh out. Primary monitoring vessels shall be equipped at all times with a properly functioning GPS unit and a fathometer.

Compliance dives or visual observations of the tract seafloor shall occur periodically by enforcement divers or monitor personnel (who are not participants of the fishery) such that one observation period will occur for every 5 days that fishing proceeds on the tract, provided that observations may proceed on a more frequent schedule when deemed necessary.

All parties agree to complete daily monitor logs of harvest and monitoring activities. Appendix B of this management plan provides information that could be included in harvest monitor logs.

- 2) All harvested geoduck shall be weighed by the monitor aboard the harvest vessel, on the water, at the harvest site and within tract boundaries.
- 3) If exigent circumstances exist (such as high wind or waves at the harvest site), which precludes weighing of geoducks on the harvest vessel, then geoducks may be weighed at a previously designated offload site. If geoducks are to be weighed at a previously designated off-load site, the monitor shall attempt to inventory the harvest aboard each vessel prior to departure from the harvest tract, subject to reasonable safety requirements, based on prevailing conditions. The inventory should include a written record of the number of fully loaded and partially loaded standard crates. At the discretion of the monitor, the inventory may also include: 1) an estimate of the percent loaded in partially loaded crates, and 2) a thorough inspection of each vessel to detect harvested geoducks. Each inventory report shall be made available to parties to this Plan, upon request.
- 4) The monitor shall take measures necessary to observe and report any discarding of geoducks between the harvest site and the landing site. The monitor or on-site enforcement officer will take all reasonable measures to assure that the harvest area is accurately marked and that

harvest does not occur outside of the tract boundaries. In addition, all harvesters must notify the monitor prior to leaving the tract or crossing a tract boundary. In such cases, the monitor will either inventory the vessel's harvest as stipulated above, or the harvest will be weighed and recorded before the vessel is allowed to proceed.

- 5) Weighing of geoducks shall be witnessed by an authorized Tribal or state official of their respective fishery. Any party to this Plan may observe any other party's harvest and compliance activities, with prior notification.

#### **24. Post-Harvest Surveys**

The parties have identified those tracts in the Strait Region that are eligible for post-harvest surveys in 2005-2006. Eligibility criteria includes a tract that has been closed to fishing. Post-harvest surveys will be used to update the individual tract biomass within the region following completion of the surveys. The parties will agree to additional uses of post-harvest survey data as appropriate. The parties to the Strait Region will determine the method of analysis for comparing pre-harvest biomass estimates with post-harvest biomass estimates plus reported catch, and when appropriate, the timeframe and distribution for payback when significant differences in the estimates indicate non-reporting has occurred.

Post-harvest surveys should be conducted within two years of closing a tract. The party(ies) harvesting a particular tract should be responsible for the post-harvest surveys on that tract. However, the parties are free to negotiate alternate survey responsibilities within the Strait Region. Post-harvest survey methods are described in Appendix C.

#### **25. Unregulated Harvest (Poaching)**

Within the Strait, if the source and quantity of geoduck taken by poaching on a commercial tract is known, that amount will be deducted from the tract biomass. When poaching results in over-harvest, as agreed to by the parties, the parties will meet to discuss management actions needed to ensure the TAC is not exceeded, according to a schedule and method as agreed to by the parties.

#### **26. Dispute Resolution**

Before initiating formal dispute resolution the parties shall first attempt informal resolution of any disputes regarding provisions of this Plan. The process of informal resolution shall include written notice that fully describes the dispute and at least one meeting (in person or telephonic) concerning the dispute. If such a process does not resolve the dispute, the parties shall abide by the formal dispute resolution process stipulated in Section 9 of the Revised Implementation Order.

#### **27. Changes To This Plan**

Changes to this Plan may be made only upon written agreement by all the signatory parties.

**28. Authorized Signatures**

This Plan is made by the following parties, and each of the undersigned persons has authority to enter this Plan under paragraph 4.5 of the federal district court’s Revised Implementation Order.

For the Lower Elwha Klallam Tribe:

name: \_\_\_\_\_  
date: \_\_\_\_\_

For the Suquamish Tribe:

name: \_\_\_\_\_  
date: \_\_\_\_\_

For the Jamestown S’Klallam Tribe:

name: \_\_\_\_\_  
date: \_\_\_\_\_

For the Tulalip Tribe

name: \_\_\_\_\_  
date: \_\_\_\_\_

For the Port Gamble S’Klallam Tribe:

name: \_\_\_\_\_  
date: \_\_\_\_\_

For the State of Washington  
Department of Fish & Wildlife:

name: \_\_\_\_\_  
date: \_\_\_\_\_

For the Swinomish Tribe

name: \_\_\_\_\_  
date: \_\_\_\_\_

For the State of Washington  
Department of Natural Resources:

name: \_\_\_\_\_  
date: \_\_\_\_\_

## Appendix A

### Commercial Geoduck Tracts Used In Calculating The 2005 Fishery Quotas for the Eastern Strait of Juan de Fuca Management Region

Tract No.	Tract Name	Acres	Clams / Sq Ft	Pounds X 1000	Status
00100	Freshwater Bay	510	0.07	2404	Active, Primary
00300	Siebert Creek	981	0.06	5788	Active, Primary
00350	Dungeness Spit	728	0.12	5682	Inactive
00400	New Dungeness	404	0.03	1043	Inactive*
00450	Jamestown 1	331	0.02	638	Closed, Placed in recovery in 2004*
00500	Jamestown 2	295	0.01	463	Closed, Placed in recovery in 2000*
00600	Jamestown 4	299	0.04	1085	Closed, Placed in recovery in 2000*
00700	Sequim Bay	54	0.09	831	Inactive
01000	Protection Island	256	0.06	1682	Active, Primary
01050	Dallas Bank	249	0.07	1443	Inactive
01700	Middle Point	86	0.01	99	In Recovery*
<b>Total Pounds Commercial Biomass: 21,158,000</b>					
<b>Harvestable Quota = (2.7%) x (21,158,000) = 571,266 pounds</b>					

\* Those tracts previously harvested below the 0.04 density and placed into "recovery" status are still considered part of the total harvestable biomass calculation. The New Dungeness geoduck tract (#00400) was last harvested during the 1980's, and though the present density is calculated to fall below the 0.04 threshold, is still considered a commercially viable tract.

## **Appendix B**

While additional work is needed to develop a specific form and data elements for monitor logs, the following information currently collected by state monitors is provided as a recommendation:

1. Name of harvest monitor responsible for completing compliance log
2. Time and date harvest monitor arrives at harvest site
3. Time and date harvest monitor leaves harvest site
4. Time and date each harvest vessel enters the harvest site
5. Time and date each harvest vessel leaves the harvest site
6. Time, date, vessel name or number, name of vessel operator, and names of divers on each harvest vessel.
7. Time, date, and vessel name of each vessel for each compliance check; findings of each compliance check; and any enforcement actions taken
8. Time and date of under water compliance checks, name of harvester, and name or number of vessel checked

## Appendix C POST-HARVEST SURVEY PROCEDURES

Post-harvest surveys will be conducted in the same manner as pre-harvest surveys (per “Stock Assessment of Subtidal Geoduck Clams (*Panopea abrupta*) in Washington” *WDFW Technical Report No. FPT00-01*), with the following exceptions or modifications:

**1) Statistical Precision:** The 95% confidence bound on the estimate of post-harvest biomass will not be required to lie within  $\pm 30\%$  of the biomass estimate itself (as is required of pre-fishing survey estimates).

**2) Sample Size and Placement of Transects:** The layout of systematic grid lines of transects for post-harvest surveys will follow the procedures for pre-fishing surveys in *WDFW Technical Report No. FPT00-01* (in the section “Standard Layout of Systematic Grid Lines”). Briefly, this calls for the first grid line of transects to begin at a randomly-selected point along the tract’s 18 ft MLLW contour, and subsequent lines of transects are placed at 1,000-ft intervals along the entire length of the tract’s 18 ft MLLW contour. The only exception to this spacing would occur if the pre-fishing survey on the tract used a smaller interval, in which case the post-harvest survey will use the same interval. Following this procedure, it is expected that the sample size (i.e., the number of transects) for post-harvest surveys will be very similar to the sample size for the pre-fishing survey on the same tract. Some minor difference in sample size is expected, since the first grid line of transects for the post-harvest survey will begin at a different location along the inshore contour (due to random placement), and because there will inevitably be variations in the exact course swum by divers on the two surveys.

**3) Dig Samples:** Dig samples of geoducks need not be taken during post-harvest surveys except in the special case described below. In most cases, the biomass estimate for the post-harvest survey will be the product of the mean density of geoducks (from the post-harvest survey) and the mean weight per geoduck (from the pre-fishing survey). If, however, the post-harvest biomass estimate results in rejection of the null hypothesis (i.e., if the *t*-test suggests that statistically significant non-reporting has occurred on the tract), then a dig sample will be taken and the mean weight-per-geoduck estimate will be re-calculated using this post-harvest dig sample. The dig sample, if required, will be an unbiased series of cluster samples taken in accordance with *WDFW Technical Report No. FPT00-01*.

**4) Articulated shells:** During post-harvest surveys, all articulated geoduck shells found within the boundaries of survey transects may be counted, and the shell length measured to the nearest millimeter. The number and shell length of any articulated shells removed from a tract by compliance or enforcement staff will be recorded and provided to the appropriate state or tribal biologist.

## Appendix D

The following organizations and contacts are to receive Tribal regulations and State notices to harvest. In addition, the parties agree to distribute the names of Tribal and State harvest monitors to any party to this agreement, along with the monitor's cell phone number, upon request.

<u>Organization</u>	<u>Contact</u>	<u>Telephone Number</u>	<u>Fax Number</u>
Port Gamble S' Klallam Tribe	Tamara Gage	360 297-6290	360 297-4791
Jamestown S' Klallam Tribe	Kelly Toy	360 681-4641	360 681-4611
Lower Elwha Klallam Tribe	Doug Morrill	360 457-4012 ext. 18	360 452-4848
Point No Point Treaty Council	Randy Hatch	360 297-6536	360 297-3413
Suquamish Tribe	Paul Williams	360 394-8443	360 598-4666
Tulalip Tribe	Mike McHugh	360 651-4493	360 651-4490
Swinomish Tribe	Jim Gibson	360 466-7283	360 466-4047
Washington Department of Fish and Wildlife	Deb Kuttel	360 902-2819	360 902-2158
Washington Department of Natural Resources	Celia Barton	360 902-1025	360 902-1786
Washington Department of Health	Helen Seyferlich	360 236-3323	360 236-2257

### Enforcement Contacts

Enforcement actions involving the Washington Department of Fish and Wildlife Enforcement Division should be initiated through the Washington State Patrol (WSP). The WSP contact number is 360-478-4646.

<b>Contact</b>	<b>Organization</b>	<b>Telephone</b>	<b>FAX Number</b>
Kenn Johnson	Suquamish Tribe	360 598-4334	360 598-4414
Robert Myers	The Tulalip Tribes	425 754-7317	360 651-3360
Joe Turrey	Elwha Klallam Tribe	360-460-4093	360-452-4848
Tom O'Rourke	Jamestown S' Klallam Tribe	360-460-2309	360-681-4611
Tim Reiber	Port Gamble S' Klallam Tribe	360-731-8675	360-297-4791
Ed Fernando	Skagit System Cooperative	360-854-7057	360-854-7053
Gary James	Lummi Tribe	360-384-2256	360-384-4543
Dan Brinson	WDFW	360-902-8358	360-902-8860
Ken Dean	WDNR	360 791-7614	360 902-1786