



KING COUNTY

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

Signature Report

December 4, 2018

Ordinance 18840

Proposed No. 2018-0191.2

Sponsors Upthegrove

1 AN ORDINANCE creating the Poverty Bay shellfish
2 protection district; establishing the district's boundaries;
3 establishing a shellfish protection program; and adding a
4 new chapter to K.C.C. Title 2.

5 STATEMENT OF FACTS:

- 6 1. The Washington state Department of Health regulates commercial
7 shellfish beds consistent with the National Shellfish Sanitation Program.
- 8 2. The Washington state Department of Health collects a minimum of six
9 water quality samples per year at defined nearshore marine water quality
10 monitoring stations. The monitoring stations are labeled in Attachment A
11 to this ordinance. The National Shellfish Sanitation Program standard for
12 approved shellfish harvesting is a fecal coliform geometric mean not
13 greater than fourteen organisms per one hundred milliliters with an
14 estimated ninetieth percentile not greater than forty-three organisms per
15 one hundred milliliters.
- 16 3. Due to the failure to meet the National Shellfish Sanitation Program
17 standard at the Washington state Department of Health marine water
18 quality monitoring stations at the mouth of Cold creek and at the mouth of
19 Woodmont creek, on September 14, 2016, the Washington state

20 Department of Health officially downgraded from approved to
21 conditionally approved status the classification of 124.4 acres of
22 commercial shellfish harvesting area in Poverty bay, which is located on
23 Puget Sound in King County.

24 4. Due to the downgrade, RCW 90.72.045 requires the King County
25 council to create a shellfish protection district and establish a shellfish
26 protection program to address the causes or suspected causes of pollution
27 contributing to the water quality degradation that led to the downgrade.
28 Additionally, RCW 90.72.045 requires the council to initiate
29 implementation of the shellfish protection program within sixty days after
30 it is established.

31 5. The Washington state Department of Health determined that the
32 degradation of Poverty bay water quality is primarily due to sources of
33 fecal coliform.

34 6. Sources of fecal coliform including, but not limited to, stormwater
35 conveying pet waste and agricultural runoff, and failing on-site sewage
36 systems threaten public health and safety when shellfish harvested from
37 Poverty bay is consumed.

38 7. King County convened a technical committee consisting of
39 representatives of the cities of Des Moines, Federal Way, Kent and
40 SeaTac, the Washington state Department of Health, Department of
41 Ecology, Department of Natural Resources, Department of Transportation
42 and Parks and Recreation Commission, Public Health - Seattle & King

43 County, the Lakehaven and Midway sewer districts, the University of
44 Washington and the Puyallup Tribe. The technical committee held several
45 meetings in 2015, 2016 and 2017 to discuss the boundaries of the district,
46 elements of the shellfish protection program and administration of the
47 district. It reviewed five options based on monitoring data and watershed
48 boundaries, and recommended the boundaries in Attachment A to this
49 ordinance.

50 BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

51 SECTION 1. Sections 2 through 7 of this ordinance should constitute a new
52 chapter in K.C.C. Title 2.

53 NEW SECTION. SECTION 2. The Poverty Bay shellfish protection district is
54 hereby created in accordance with RCW 90.72.030 and RCW 90.72.045. The council
55 shall constitute the governing body of the district and shall adopt a shellfish protection
56 program with elements and activities to be effective within the district.

57 NEW SECTION. SECTION 3. The legal boundaries of the Poverty Bay
58 shellfish protection district are in Attachment A to this ordinance.

59 NEW SECTION. SECTION 4. The purpose of the Poverty Bay shellfish
60 protection district is to implement a shellfish protection program to address the causes or
61 suspected causes of pollution resulting in water quality degradation that led to the
62 Washington state Department of Health downgrade of the classification of the
63 commercial shellfish harvesting area of Poverty bay. The Poverty Bay Shellfish
64 Protection District Closure Response Plan, Attachment B to this ordinance, is hereby
65 adopted as the shellfish protection program.

66 NEW SECTION. SECTION 5. The King County department of natural
67 resources and parks shall be the lead agency for implementation of the Shellfish
68 Protection District Closure Response Plan. The department shall coordinate with state
69 agencies and affected cities, tribes, utility districts that have regulatory authority for any
70 of the sources of nonpoint pollution covered by the Plan. and other appropriate entities
71 with regulatory authority or activities within the boundary to implement the Poverty Bay
72 Shellfish Protection District Closure Response Plan.

73 NEW SECTION. SECTION 6. Within one year of the effective date of this
74 ordinance, and every year thereafter, the executive shall transmit a report about
75 implementation of this chapter to the council. The report shall be prepared in cooperation
76 with the entities listed in section 5 of this ordinance. It shall include a description of the
77 status and progress of the shellfish protection program, a review of the legal boundaries
78 of the district and, if applicable, a recommended adjustment to the legal boundaries. The
79 report shall be filed in the form of a paper original and an electronic copy with the clerk
80 of the council, who shall retain the original and provide an electronic copy to all
81 councilmembers, the council chief of staff and the lead staff to the planning, rural service
82 and environment committee or its successor. The clerk of the council shall submit the
83 report to the Washington state Department of Health once the council acknowledges
84 receipt of the report.

85 NEW SECTION. SECTION 7. When the Washington state Department of
86 Health has reclassified the affected commercial shellfish harvesting area of Poverty Bay
87 to approved status, the department of natural resources and parks shall prepare and
88 transmit to the council a

89 proposed ordinance dissolving the Poverty Bay shellfish protection district and repealing
90 this chapter.

91

Ordinance 18840 was introduced on 4/23/2018 and passed by the Metropolitan King
County Council on 12/3/2018, by the following vote:

Yes: 9 - Mr. von Reichbauer, Mr. Gossett, Ms. Lambert, Mr. Dunn,
Mr. McDermott, Mr. Dembowski, Mr. Upthegrove, Ms. Kohl-Welles
and Ms. Balducci

No: 0

Excused: 0

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON

J. Joseph McDermott, Chair

ATTEST:

Melani Pedroza, Clerk of the Council



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CLERK
KING COUNTY COUNCIL

APPROVED this 10 day of DECEMBER, 2018.

Dow Constantine, County Executive

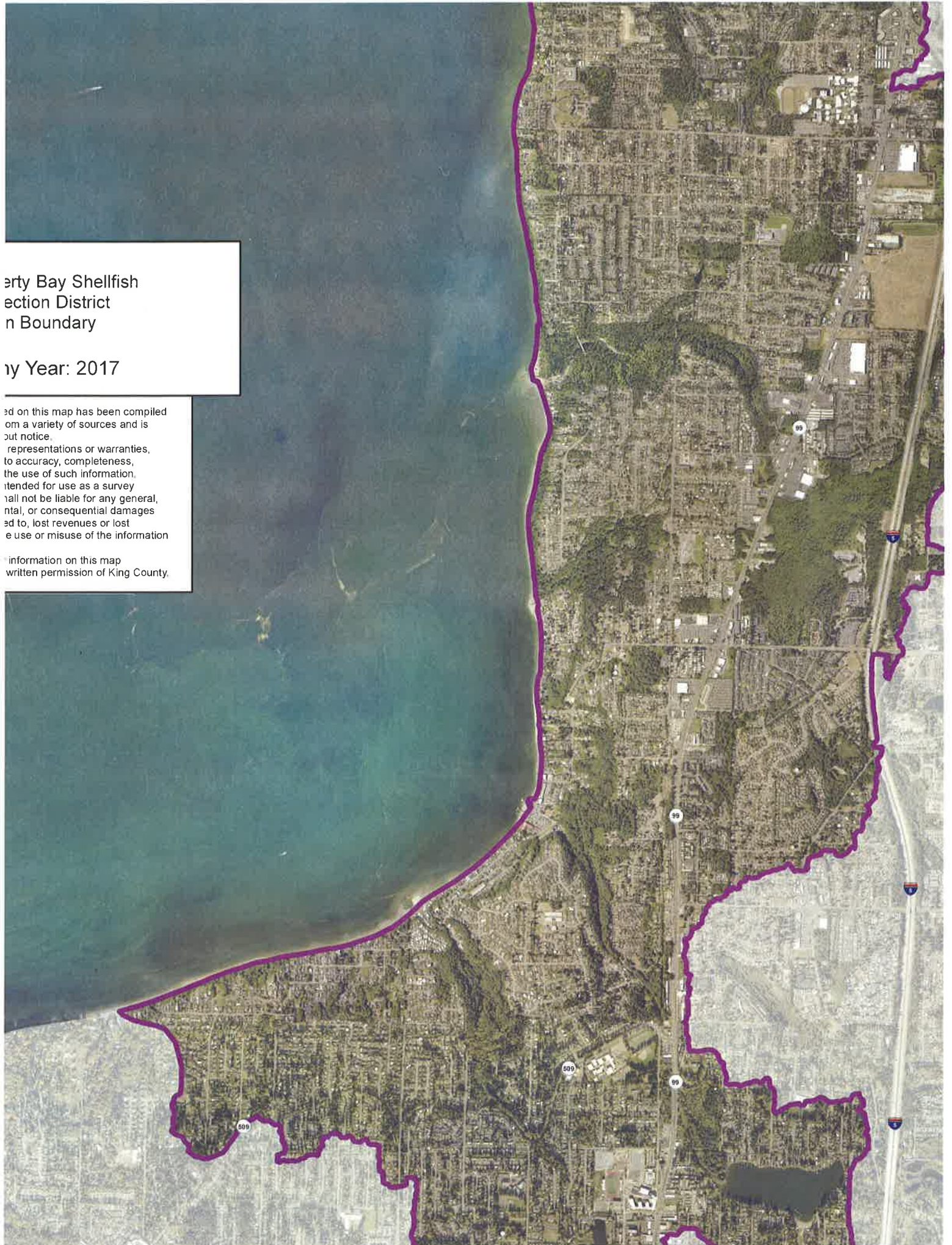
Attachments: A. Poverty Bay Shellfish Protection District Map Boundary dated November 28, 2018, B.
Poverty Bay Shellfish Protection District Map Boundary dated November, 2018

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n Boundary

ry Year: 2017

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Poverty Bay Shellfish Protection District

CLOSURE RESPONSE PLAN

November, 2018



King County

Department of Natural Resources and Parks
Water and Land Resources Division

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Preface

The goal of the Poverty Bay Shellfish Protection District (SPD) is to identify and eliminate sources of bacterial pollution within the district boundaries. This Closure Response Plan is an iterative document designed to evolve and change in response to the needs of the Shellfish Protection District.

Introduction

Poverty Bay is located along the eastern coast of Puget Sound from Federal Way to Des Moines. The shellfish harvesting area is nearly 1,000 acres. Half of the wild geoducks are harvested by the Puyallup Tribe while the remaining are auctioned off by the Washington State Department of Natural Resources (DNR). The proceeds fund aquatic restoration projects throughout Puget Sound.

Based on marine water quality sampling stations #722 and #720 failing the National Shellfish Sanitation Program standard, the Washington State Department of Health (DOH) downgraded approximately 125 acres in the Poverty Bay commercial shellfish growing area from “Approved” to “Conditionally Approved” in 2016. In accordance with RCW 90.72 this triggered the requirement for the development of a Shellfish Protection District (SPD), and the need for a strategy to address bacterial pollution in the area.

RCW 90.72.040 requires counties to cooperate with cities, towns, and water-related special districts to establish shellfish protection district boundaries and implement shellfish protection programs. In response to the notification from DOH, King County formed the Poverty Bay Technical Committee (TC), and initiated a bacterial Pollution Identification and Correction (PIC) field monitoring program with National Estuary Program funds from the EPA. The TC consists of representatives from state and local entities with regulatory authority or activities in the area including King County, the cities of Des Moines, Federal Way, Kent, and SeaTac, DOH, Washington State Department of Ecology, Washington State Department of Natural Resources (DNR), Washington State Parks and Recreation Commission, Washington State Department of Transportation, Lakehaven and Midway Sewer Districts, the University of Washington, and the Puyallup Tribe.

Boundaries of the Shellfish Protection District

The basin for the attached boundary map (Appendix A) is nearly 10 square miles of mostly urban and suburban residential development with some commercial corridors, parks, playfields, several major arterial roadways, and almost no agricultural lands. The boundary encompasses parts of the City of Des Moines, Federal Way, Kent, and SeaTac, and both Lakehaven and Midway Sewer districts operate within this basin. There are five primary freshwater creeks that discharge within the boundary limits. Starting with the most southerly and moving northward they are Cold, Redondo, Woodmont, the South Fork of McSorley, and Massey creeks.

The map boundaries were drawn to include all areas with the potential to further influence the status of the downgraded shellfish bed. The boundary map includes areas in which nonpoint pollution may be threatening water quality and the restoration of shellfish harvesting. The TC has identified the need to develop a process for reviewing and recommending revisions to the SPD boundaries if applicable. Recommended revisions will be submitted to the King County Council. Modifications to boundaries will require council approval.

There is currently no plan to use the Poverty Bay SPD as a funding mechanism. All parties are working towards the upgrade of the identified shellfish beds and designations that will allow for the year-round harvest of shellfish with existing resources, programs, and actions. This will be accomplished through a series of coordinated education and outreach, pollution identification, and source control efforts outlined in Table 1.

Description of the Area

The SPD includes ten different catchments that drain to nearly five miles of shoreline. Approximately four miles of shoreline falls within the City of Des Moines, and about one mile is located within the City of Federal Way. Additionally, a small portion of shoreline falls within Saltwater State Park and is the responsibility of the Washington State Parks and Recreation Commission. There is approximately 1000 acres of shellfish harvesting beds in Poverty Bay. In nearly 500 acres shellfish harvesting is “prohibited”, and it is “approved” in about 300 acres and now “conditionally approved” in 225 acres. The shellfish beds that are designated as “conditionally approved” present an actual or potential public health hazard during predictable periods of time during the year, from June 1st to November 30th. Shellfish cannot be harvested from those beds during that timeframe. About half of the geoduck are exclusively available to the Puyallup Tribe and the other available by auction and managed by Washington State DNR. This Closure Response Plan sets forth proposed actions intended to restore the acres that are classified as “conditionally approved” to an “approved” classification.

Site investigations have identified 20 discharge locations along the shoreline from Saltwater State Park to the mouth of Redondo Creek, where there are pipes that discharge to the beach, with many more located up each of the major creek systems. More extensive shoreline investigations are planned.

The cities of Des Moines, Federal Way, Kent, and SeaTac are all responsible for administering stormwater management programs under their municipal National Pollutant Discharge Elimination System permit. Actions required by the permit include, but are not limited to, conducting routine inspections and maintenance on stormwater infrastructure, detecting and

eliminating illicit connections or discharges of pollutants, and making low impact development the preferred and most commonly used approach when developing or redeveloping properties.

Wastewater collection and disposal is managed by three primary organizations. Midway Sewer District and Lakehaven Sewer District both operate within the SPD boundaries. Lakehaven Sewer District operates a Wastewater Treatment Plant within the SPD boundaries. While the Wastewater Treatment Plant for Midway Sewer district is adjacent to Des Moines Creek, it sits outside the proposed SPD boundary.

In addition, Public Health - Seattle & King County's septic system program reviews and approves the design and installation of new on-site sewage (septic) systems (OSS) and repair proposals and installations for failing on-site sewage systems. Public Health – Seattle & King County is typically made aware of failures from repair applications, reports by OSS professionals, complaints by neighbors, or at a time of sale inspection. When a failure is suspected, Public Health will investigate the site for evidence of surfacing sewage. If a failure is confirmed, they will ensure the system is repaired or connected to sanitary sewer lines, if possible. Within the SPD boundary, there are 2,292 parcels with OSS. Only about 50 of them are commercial and the remaining are residential. It is likely there are OSS that are failing without anyone knowing. On-the-ground investigations help to track failing OSS and broken sewer pipes.

There are no major agricultural activities identified within the SPD. Most likely there are a few hobbyists operating some small scale domestic animal operations, including chicken coops and private pony or horse barns, within the guidelines of various city ordinances, but these potential sources of bacteria are not considered a priority to the SPD at this time.

Boating and accessing the shoreline are the primary recreational activities within the SPD. Only a couple of businesses are located along the shoreline, with the bulk of commercial activity located upland in the Woodmont Creek, McSorley Creek, and Massey Creek drainage basins. The city of Des Moines operates a marina for 840 vessels on the northernmost edge, just outside of the SPD boundary where they offer free pump out of sewage included in the moorage fee. The city of Des Moines also operates a boat launch at Redondo Beach where there is public beach access.

Strategy and Actions

The King County Department of Natural Resources and Parks is the lead agency administering and coordinating the Shellfish Protection District and Closure Response Plan. The cities of Des Moines, Federal Way, Kent, and SeaTac are all involved as partner organizations. In addition, DOH, Washington State Department of Ecology, Washington State Department of Transportation, DNR, Washington State Parks and Recreation Commission, and Lakehaven and Midway Sewer Districts are also partners in the Shellfish Protection District.

Closure Response Plan activities are dependent upon the results of an ongoing sampling program and will evolve to reflect the outcomes of traditional bacterial culture and bacteriological genetic analyses designed to more accurately identify sources of bacteria. For the following table the

designation of “Cities/County” means Des Moines, Federal Way, Kent, SeaTac, and King County:

Table 1: Poverty Bay Shellfish Protection District Proposed Actions

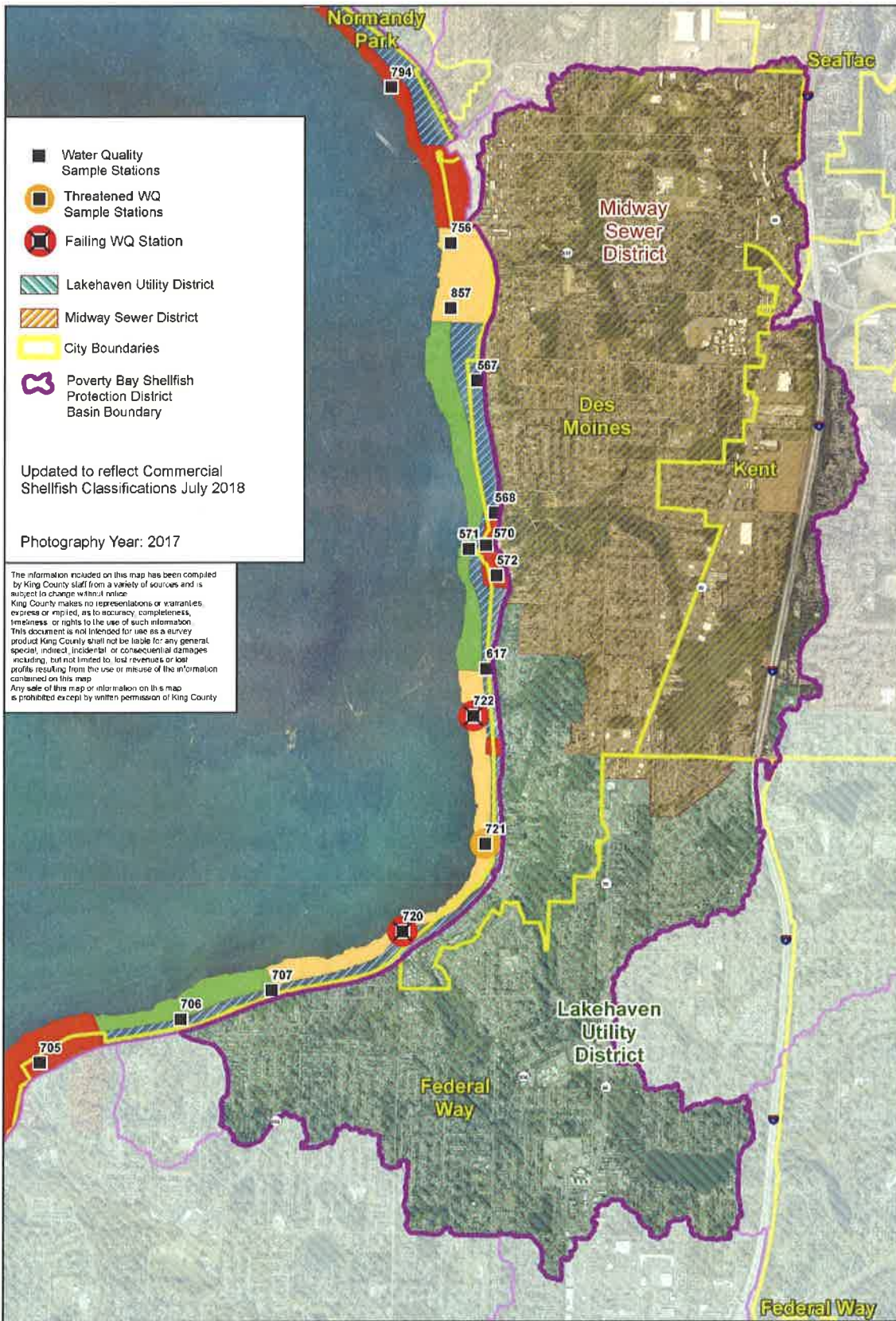
Task & Objective	Lead Agency/ Partner	Timeline	Funding Source	Priority	Status	Actions/ Products/Outcomes	Comments/ Challenges/ Resources Needed
Objective 1: Planning, Coordination, and Reporting							
Create Shellfish Protection District	King County / All	1 st Quarter of 2018	King County	High	In progress	District created	
Develop a closure response plan/shellfish protection program	King County / All	Started	King County	High	Drafted	Adaptive management plan	
Develop a Shellfish Protection District work group	King County / All	1 st Quarter of 2018	King County	High	Completed	Workgroup and email distribution list	
Regular meetings of the Shellfish Protection District Committee or work group	King County / All	Started	King County	High	Ongoing	Regular meetings	
Annual Reporting to DOH under RCW 90.72	King County	Started	King County	High	Ongoing	Annual report	
Develop a Pollution Identification and Correction Program	King County / All	Unknown	King County	High	Not started	PIC program documentation	Dependent on sampling results for genetic markers
Create Pollution Identification Process Flowchart	King County	Completed	King County	High	Completed	Flowchart	Attached to this document (Appendix B)
Develop a formal process for recommending boundary changes, if applicable	King County/ All	3 rd Quarter of 2018	King County	High	Not started	Clear process for recommending boundary changes to be made by the King County council, if applicable	

Task & Objective	Lead Agency/ Partner	Timeline	Funding Source	Priority	Status	Actions/ Products/Outcomes	Comments/ Challenges/ Resources Needed
Objective 2: Monitor Water Quality, Sampling and Analyses							
Conduct marine water quality monitoring of the Growing Area	DNR / DOH	Started	DNR / DOH	High	Ongoing		
Ambient freshwater monitoring program	King County / UW / Des Moines / Federal Way	Started	King County / University of Washington / Des Moines / Federal Way / National Estuary Program	High	Ongoing		
Shoreline sampling and analyses	King County / DNR / DOH	Started	DNR / King County	High	Ongoing		
Develop PIC sampling protocol including "hot spot" criteria and bracketed sampling	King County	Complete	Septage Fee		Completed	Quality Assurance Project Plan finalized	
Identify source tracing team roles and responsibilities	Cities/ County	Not started	King County	High	Not started	Documented roles and responsibilities Sampling for bacteria in the Municipal Separate Storm Sewer System	
Circulation study of the growing area	DOH	Not started	Unknown	Low			
Advanced fecal coliform source methodology (Sewage Sniffing Dog, Microbial Source Tracing, Male Specific Coliphage, Chemical Tracers)	King County / University of Washington	Started	King County / National Estuary Program	Medium	Ongoing		
Water quality data management	King County	Started	King County	High	Drafted	Singular location for storing all the	Combining existing datasets from various

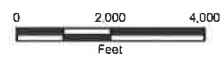
Task & Objective	Lead Agency/ Partner	Timeline	Funding Source	Priority	Status	Actions/ Products/Outcomes	Comments/ Challenges/ Resources Needed
						data	agencies is complicated
Share water quality data with stakeholder group	All Parties	Started	All	High	In progress	Singular location for storing all the data	
Objective 3: Control OSS Sources							
Implement enhanced OSS Operation and Management	Seattle - King County Public Health	TBD	Septage fee	Low	Not Started		Low priority until source of bacteria is determined pending approved authority
Identify location and risk level of septic systems in the shellfish protection district	Seattle - King County Public Health	TBD	Septage fee	Low	In progress	Location – Complete Risk level – not determined	Low priority until source of bacteria is determined
Sanitary/Parcel Surveys of marine and freshwater shoreline properties	Lakehaven sewer district, Midway sewer district, Seattle - King County Public Health	TBD	Partner agencies	Low	Not started		Low priority until source of bacteria is determined
Septic Operations & Maintenance notification and incentives	Seattle - King County Public Health	TBD	Septage fee	Low	Not started		Low priority until source of bacteria and funding is determined
Develop dye test protocol and dye test where warranted	Seattle - King County Public Health	Complete		Low - High	Drafted		Low priority until suspected source of bacteria are determined, then high
Objective 4: Control Storm Water Sources							
National Pollutant	Des Moines / Federal	Started	Des Moines / Federal	High	Ongoing	Annual Report and Stormwater	

Task & Objective	Lead Agency/ Partner	Timeline	Funding Source	Priority	Status	Actions/ Products/Outcomes	Comments/ Challenges/ Resources Needed
Discharge Elimination System (NPDES) Program Implementation	Way / Kent / SeaTac		Way / Kent / SeaTac			Management Program Plans	
Illicit discharge detection and elimination program	Des Moines / Federal Way / Kent / SeaTac	Started	Des Moines / Federal Way / Kent / SeaTac	High	Ongoing	Ongoing record keeping of identified and eliminated discharges	
Storm water facility maintenance and inspection	Des Moines / Federal Way / Kent / SeaTac	Started	Des Moines / Federal Way / Kent / SeaTac	High	Ongoing	Compliance with Municipal NPDES permit	
Low impact development	Des Moines / Federal Way / Kent / SeaTac	Started	Des Moines / Federal Way / Kent / SeaTac	High	Ongoing	Compliance with Municipal NPDES permit	
Objective 5: Education/Outreach							
Develop a communication/ social marketing plan	Cities/ County	TBD	Team NPDES Programs	High	Not started	Communication tool with general focus	Genetic testing will provide more guidance on targeted outreach
Create Website for project history, summary and updates	King County	TBD	Unknown	Medium	Not started	Centralized website for district information/data/ studies	Funding and time are the greatest obstacles
Pet waste outreach program	Cities/ County	TBD	Team NPDES Programs	Low	Not started		Genetic testing will provide more guidance on targeted outreach
Septic workshops for homeowners and realtors	Seattle – King County Public Health	TBD	Unknown	Low	Unfunded	Public workshops or easily accessible information	Genetic testing will provide more guidance on targeted outreach
Community Outreach Events	Cities/ County	TBD	Team NPDES Programs	Medium	Not started	Tabling at public festivals and various events	Need materials specific to the district, and a presence at events
Objective 6: Control Agricultural Sources							
Identify location and	Cities	Started		Low	Ongoing		Agricultural sources of

Task & Objective	Lead Agency/ Partner	Timeline	Funding Source	Priority	Status	Actions/ Products/Outcomes	Comments/ Challenges/ Resources Needed
risk level of farms							bacteria will be identified through source control inspections and illicit discharge detection and elimination programs
Objective 7: Point Sources - Waste Water Treatment Plants and Marinas							
Review WWTP records and performance	Midway and Lakehaven sewer districts	Started	Midway and Lakehaven sewer districts	High	Ongoing	Compliance with regulations	
Collection system and Combined Sewer Overflows evaluation	Midway and Lakehaven sewer districts	Started	Midway and Lakehaven sewer districts	High	Ongoing	Compliance with regulations	
Develop procedures for identifying and cleaning up homeless encampments	All Parties	Started	All	Medium	Ongoing	Defined procedures for each jurisdiction	Politically sensitive issue

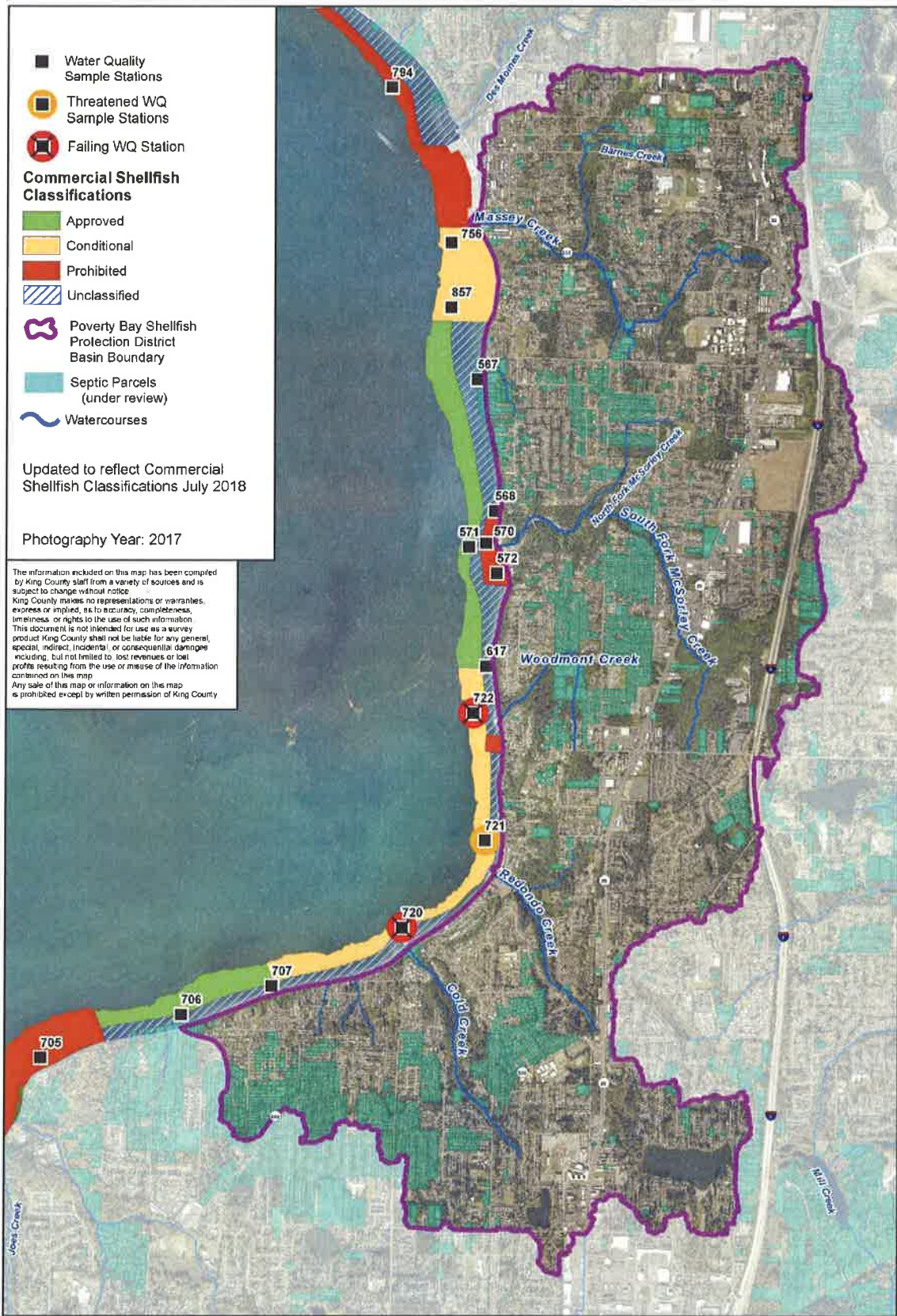


Poverty Bay Shellfish Protection District City and Utility District Boundaries

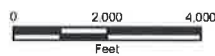


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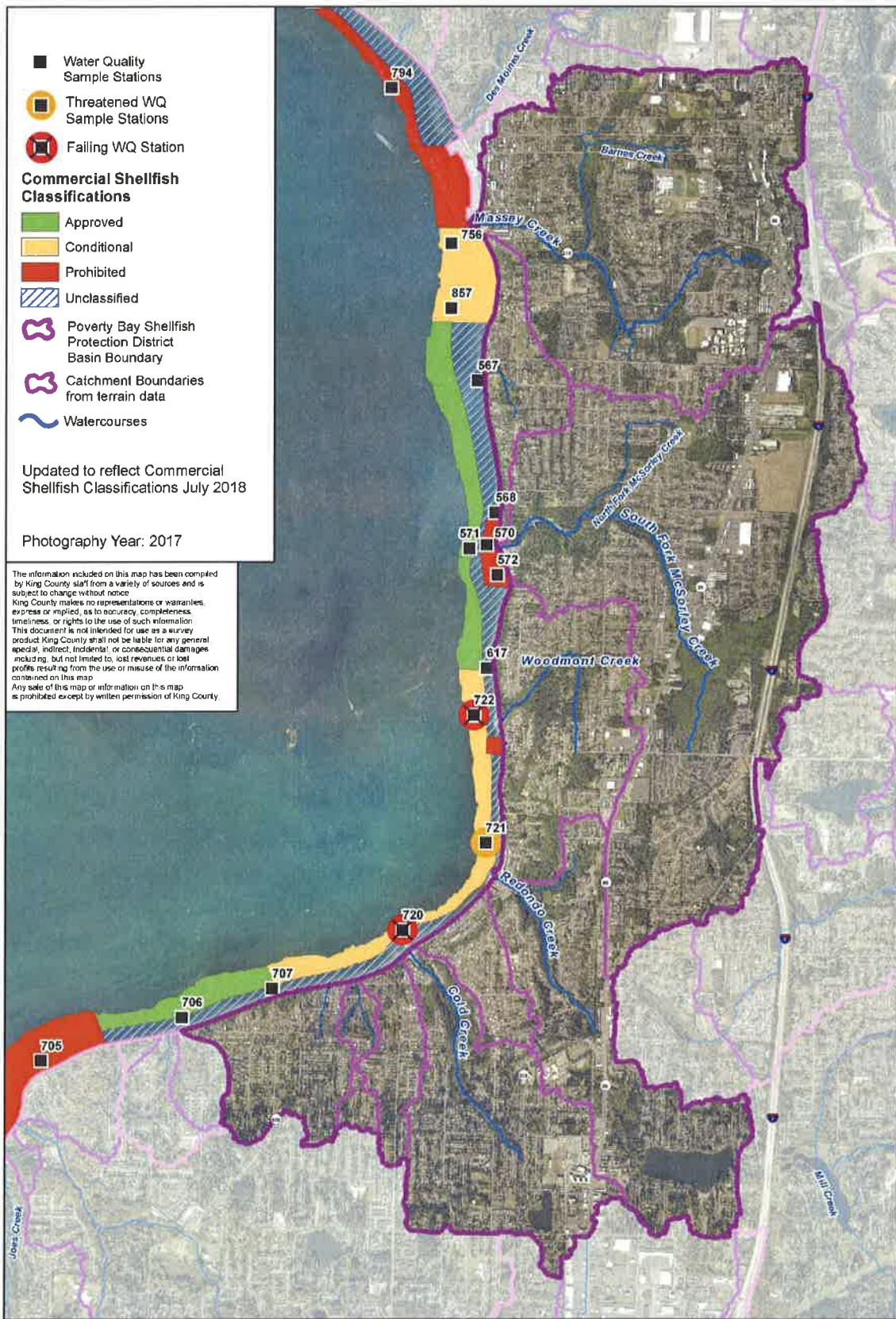
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Poverty Bay Shellfish Protection District Identified Septic Systems



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Poverty Bay Shellfish Protection District Surface Water and Drainage



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MapKit Vektor/Mapbox/Mapbox/Mapbox
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Appendix B: Poverty Bay Pollution Identification Process Flow Chart:

