# CALIFORNIA COASTAL COMMISSION

NORTH COAST DISTRICT OFFICE 1385 EIGHTH STREET · SUITE 130 ARCATA, CA 95521 VOICE (707) 826-8950 FAX (707) 826-8960



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Staff: C. Teufel–SF Date: August 21, 2015

# **ADMINISTRATIVE PERMIT**

Application No.:	9-15-0588
Applicant:	Charles Friend (Tomales Bay Oyster Company)
Location:	Mudflat and channel of Walker Creek, approximately 150 yards south of Preston Point, Tomales Bay, within California Department of Fish and Game Aquaculture Lease No. M-430- 04, Marin County
Project Description:	Request for proposed and after-the-fact approval for the removal of a berm structure comprised of PVC pipes, plastic mesh sheeting, and plastic mesh bags filled with oyster shell

# I. EXECUTIVE DIRECTOR'S DETERMINATION

The findings for this determination and any special conditions appear on subsequent pages.

<u>Note</u>: Public Resources Code Section 30624 provides that this permit shall not become effective until it is reported to the Commission at its next meeting. If one-third or more of the appointed membership of the Commission so request, the application will be removed from the administrative calendar and set for public hearing at a subsequent Commission meeting. Our office will notify you if such removal occurs.

This permit will be reported to the Coastal Commission at the following time and place: Thursday, September 10, 2015 – 9:00 a.m. Humboldt State University 1 Harpst Street Arcata, CA 95521

IMPORTANT: Before you may proceed with development, the following must occur:

Pursuant to Title 14, California Administrative Code Sections 13150(b) and 13158, you must sign the enclosed duplicate copy acknowledging the permit's receipt and accepting its contents, including all conditions, and return it to our office. Following the Commission's meeting, and once we have received the signed acknowledgement and evidence of compliance with all special conditions, we will send you a Notice of Administrative Permit Effectiveness.

#### **BEFORE YOU CAN OBTAIN ANY LOCAL PERMITS AND PROCEED WITH DEVELOPMENT, YOU MUST HAVE RECEIVED BOTH YOUR ADMINISTRATIVE PERMIT AND THE NOTICE OF PERMIT EFFECTIVENESS FROM THIS OFFICE.**

The Executive Director hereby determines that the proposed development is a category of development which, pursuant to PRC Section 30624, qualifies for approval by the Executive Director through the issuance of an administrative permit. Subject to Standard and Special Conditions as attached, said development is in conformity with the policies of Chapter 3 of the California Coastal Act, including those policies regarding public access and coastal recreation opportunities, and will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act. If located between the nearest public road and the sea, this development is in conformity with the public access and public recreation policies of Chapter 3.

CHARLES LESTER Executive Director

By:

MARK DELAPLAINE Manager

# **II. STANDARD CONDITIONS**

This permit is granted subject to the following standard conditions:

- 1. Notice of Receipt and Acknowledgement. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions is returned to the Commission Office.
- **2. Interpretation**. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
- **3. Assignment**. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
- 4. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

# **III. SPECIAL CONDITIONS**

This permit is granted subject to the following special conditions:

- 1. Evidence of Complete Removal. WITHIN 30 DAYS OF THE ISSUANCE OF THIS PERMIT, the Permittee shall provide to the Executive Director a report documenting the complete removal of the fence and berm structures and all associated debris (including oyster shell, broken PVC piping, and pieces of plastic mesh) from the fence and berm sites and adjacent areas. This report shall be developed by an independent third-party approved by the Executive Director. Any remaining fence or berm materials or associated debris documented in this report shall be removed by the Permittee as soon as feasible and this removal shall be documented by the same approved independent thirdparty in a supplemental report submitted to the Executive Director. The 30 day deadline established in this condition may be extended by the Executive Director for an additional 30 days if requested by the applicant prior to the close of the deadline and supported by evidence that completing the removal work and report within 30 days of permit issuance is not feasible (i.e. adequate tides would not occur in this time period or additional time is needed to obtain other authorizations needed to complete the work).
- 2. Marine Debris Avoidance. Removal activities shall be carried out in a manner that minimizes fragmentation and release of materials, including plastics and oyster shell, into the marine environment. Tools or methods shall not be used that are likely to break apart or cut the materials during extraction, transport, or collection. All pieces of material that break during removal shall be collected and transported to shore for appropriate disposal. No discard, storage, or staging of tools or materials shall occur in Tomales Bay. To the maximum extent feasible, removal activities shall be carried out during periods of low water to minimize the potential for material to escape collection.
- 3. National Marine Sanctuary Approval. PRIOR TO INITIATING REMOVAL ACTIVITIES AUTHORIZED UNDER THIS PERMIT, the Permittee shall provide to the Executive Director a copy of a permit issued by the Gulf of the Farallones National Marine Sanctuary (Sanctuary) for the complete removal of the berm structure and associated debris. The Permittee shall inform the Executive Director of any changes to the project required by the Sanctuary. Such changes shall not be incorporated into the project until the Permittee obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.
- 4. Future Uses and Improvements. This approval is limited to the uses and development specifically permitted by Coastal Development Permit 9-15-0588. All development must occur in strict compliance with the proposal as set forth in the application, subject to any special conditions. Any deviation from the approved plans must be submitted for review by the Executive Director to determine whether an amendment to this coastal development permit is required. Any additional development, including, but not limited to the construction, installation, or placement of materials, structures, or equipment in Tomales Bay not directly related to authorized shellfish aquaculture operations will

require an amendment to the permit or a new coastal development permit unless the Executive Director determines that no amendment or new coastal development permit is legally required.

5. Permit Effectiveness and Condition Compliance. This coastal development permit shall be deemed effective upon the Commission's concurrence on September 10, 2015 with the Executive Director's determination to issue the administrative coastal development permit. Because some of the proposed development has already commenced, this coastal development permit shall not expire. Failure to comply with the special conditions of this permit may result in the institution of an action to enforce those conditions under the provisions of Chapter 9 of the Coastal Act.

# IV. FINDINGS FOR EXECUTIVE DIRECTOR'S DETERMINATION

### A. PROJECT DESCRIPTION & BACKGROUND

The project area is located offshore of Preston Point and the mouth of Walker Creek on the east side of Tomales Bay, near the community of Marshall in western Marin County (Exhibit 1). The project area is within California Aquaculture Lease No. M-430-04, a roughly 62 acre area of tidelands leased to the Charles Friend Oyster Company and used by the Tomales Bay Oyster Company (TBOC) for the cultivation of shellfish.

In March 1994, a coastal development permit (CDP No. 1-93-73) was issued to Bay Bottom Beds, Inc. for shellfish aquaculture development consisting of the placement and operation of several hundred ground lines and floating lines on two state aquaculture leases in Tomales Bay (lease numbers M-430-04 and M-430-19). In February 2002, this CDP was transferred by the Commission to two new entities through an assignment of permit action (E-02-007-T1). Charles Friend of TBOC was transferred the CDP for lease number M-430-04 and Michael Toussaint was transferred the CDP for lease number M-430-19. CDP No. 1-93-73 only authorizes the placement and use of a specific type and configuration of shellfish culture apparatus (shown in Exhibits 4-6 of the Commission's associated findings) and does not provide for the installation or maintenance of non-culture structures such as fences or berms in the lease area. Such additional development would require a new CDP or permit amendment.

Despite this, in December 2014, TBOC constructed several fence and berm structures within intertidal mudflats and a subtidal channel near the mouth of Walker Creek without benefit of the required state and federal authorizations (including a coastal development permit). These structures were constructed using PVC pipes, copper wire, plastic mesh sheeting, and six-square foot plastic mesh bags either empty or filled with empty oyster shells. One structure stretched approximately 760 feet across the mudflat with a height of roughly four feet, and the other was comprised of several sections near a tidal channel, the largest section of which was approximately 150 feet long and four feet high. As shown in **Exhibit 2**, these materials were placed on and in the mudflat and channel and used to build structures intended to alter the movement and flow of water and sediment into Tomales Bay from Walker Creek during winter rain events. These structures and the apparent remains or scour depressions left from

similar structures installed in previous years (also without the benefit of the required permits and authorizations) are visible in aerial and satellite photographs of the area, including those available on internet applications such as Google Maps and Bing Maps.

TBOC has observed in recent years that sediment released into the bay from Walker Creek during and after storms can accumulate on and partially bury its shellfish and aquaculture equipment, thus negatively affecting its commercial operations. TBOC has therefore installed the fences and berms during the winter months in an attempt to address this situation.

The installation and presence of these structures raised concerns with staff of the Gulf of the Farallones National Marine Sanctuary (Sanctuary), who concluded that their unauthorized placement and construction materials had the potential to adversely affect Sanctuary resources. Therefore, in February 2015, the Sanctuary contacted TBOC to discuss the removal of these structures, and on February 18 issued a salvage permit to TBOC requiring their complete and timely removal. In compliance with this salvage permit from the Sanctuary, TBOC removed one of the fence structures and initiated removal of another. These development activities were brought to the attention of Commission staff, which requested TBOC to submit a CDP application to permit the completion of removal activities and to authorize, after-the-fact, the removal activities it had already carried out. Commission staff also contacted Sanctuary staff to ensure that the period of its salvage permit could be extended to allow TBOC to obtain a CDP before completing the work. Commission and Sanctuary staff have coordinated closely on these permits and if the Commission approves the issuance of this CDP with the recommended conditions, the Sanctuary would amend its salvage permit to reflect the deadline for completion established through Special Condition 1.

In its CDP application for this project, TBOC proposes to complete the removal of the unpermitted berm and fence structures that remain within the mudflats and tidal channel of Tomales Bay. As shown in **Exhibit 3**, most of these structures have been removed; however a variety of construction materials (PVC pipes, plastic mesh bags and mesh sheeting) and piles of empty oyster shell remain to be collected from the mudflat and from within the submerged channel bed.

Proposed removal activities would include the use of a work boat to transport TBOC personnel to the project site at low tide and the hand collection and removal of the several dozen PVC pipes, mesh bags, mesh, and piles of spilled oyster shell that remain on the mudflats. Some hand tools, including rakes and shovels may be used to expedite collection and removal work on the mudflat. To collect material from within the submerged channel (approximately six feet deep at low tide), TBOC proposes to use a combination of mask-and-snorkel equipped workers and long-handled claw rakes to locate and extract the mesh bags. The bags would then be piled on the mudflat outside of the channel for recovery into a small support boat. PVC pipes (1.5 to 3 inch diameter) that have been driven into the mudflats would be removed by hand and transported to shore for reuse or disposal. Loose shell that has spilled from mesh bags during previous recovery efforts would be collected using hand tools, placed into empty mesh bags and removed. Aside from the outboard motor powered support boat, no mechanized equipment or power tools would be used during the proposed removal work.

In its application, TBOC also requests after-the-fact authorization for the removal activities it carried out on the unpermitted structures in the project area during the past winter and spring. Removal activities carried out in the spring included the hand collection and removal of several hundred plastic mesh bags and PVC pipes over the course of several low tide events in mid- and late-March. These materials were used to create a berm and spread across roughly 150 feet of mudflat at the edge of a tidal channel and placed within the channel itself.

Activities carried out in the winter included the hand extraction and collection of approximately 400 plastic mesh bags and 700 PVC pipes (1.5 to 3 inch diameter, 4 to 5 feet long) that were pounded vertically into the mudflat to create an approximately 760 foot long fence. The fence was removed by hand over the course of two days in February 2015 and was carried out during low tides and with the support of small outboard motor powered boats. During removal work, piles of material were placed on the mudflats for later collection. Some of this material was displaced by wind and tidal action and dispersed throughout the project area. Through the work of TBOC personnel and extensive efforts of an independent volunteer, this escaped material appears to have been successfully collected.

During the course of its review of this permit application, Commission staff approached TBOC about working with the relevant state and federal resource agencies to seek a more viable long-term solution to the winter sedimentation issue on its aquaculture lease. Potential alternatives to the unauthorized installation of fences and berms in Tomales Bay could include the use of elevated or floating cultivation equipment that would be less prone to burial. TBOC has expressed its willingness to consider this approach and to work with Commission staff on coordinating with relevant resource agencies and seeking the appropriate authorizations that may be needed to implement such solutions.

# **B. STANDARD OF REVIEW**

The proposed project is located in the Commission's retained jurisdiction. The County of Marin has a certified local coastal program (LCP), but the site is seaward of the Tomales Bay shoreline within an area over which the state retains a public trust interest. Therefore, the standard of review that the Commission must apply to the project is the Chapter 3 policies of the Coastal Act.

# **C. OTHER AGENCY APPROVALS**

#### **Gulf of the Farallones National Marine Sanctuary**

On February 18, 2015, the Gulf of the Farallones National Marine Sanctuary (Sanctuary) issued to Tomales Bay Oyster Company a Salvage/Recovery Operations Permit (permit number GFNMS-2015-002) for the removal of all unpermitted fencing structures from the mouth of Walker Creek in Tomales Bay. This permit required all removal activities to be carried out by hand, included several protective measures for marine wildlife and historical and marine archeological resources, and specified that removal must be completed by March 30, 2015. Commission staff has been coordinating with Sanctuary staff over the past several months and Sanctuary staff is in the process of amending TBOC's Salvage/Recovery

Operations Permit to include a new deadline for completion that is consistent with any similar deadline required by the Commission.

### **D. MARINE BIOLOGICAL RESOURCES**

#### Section 30230 of the Coastal Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for longterm commercial, recreational, scientific, and educational purposes.

#### Section 30231 of the Coastal Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

The previously completed and proposed removal work has the potential to result in adverse impacts to marine resources through the disturbance of marine habitat and release of debris into the marine environment.

#### **Habitat Disturbance**

Collection, extraction, and removal of the fence and berm structures and construction materials from the mudflats of Tomales Bay would result in the trampling and minor excavation of soft sediment areas beneath and adjacent to the installation sites of these structures and materials. In total, approximately 2,000 square feet<sup>1</sup> of intertidal and subtidal mudflats would be affected to various degrees by this disturbance, adversely affecting the invertebrate species and benthic communities that populate this area.

Research has shown that on mudflats, the mechanical disturbance of sediments caused by trampling can cause surface dwelling animals to become buried and burrowing animals to be pulled to the surface, often resulting in their injury or death (Rossi et al. 2007). Footsteps can also damage and displace the algal biofilm that develops on the surface of mudflats (Stal and de Brouwer 2003) and destroy animal burrows. This disturbs the cohesion of sediment particles, leading to increased turbidity, sedimentation, and erosion, and can also change the

<sup>&</sup>lt;sup>1</sup> This area was calculated by assuming that a two foot wide strip along the 760 foot length of the fence (1520 sq. ft.), and a two foot wide strip along the 150 foot length of the berm (300 sq. ft.), would be disturbed during their removal, along with a roughly 200 sq. ft. area associated with staging and access to and from the support boat (1520+300+200=2020 sq. ft.).

strength of biological interactions and affect other organisms throughout the benthic community (Peterson 1977; Wynberg and Branch 1997; Stal and de Brouwer 2003; Contessa and Bird 2004 and references therein). Trampling can also alter the topographic complexity of mudflats, which can affect the recruitment and spatial distribution of microalgae (Wynberg and Branch 1994) and larger organisms (Rossi and Chapman 2003; Cruz-Motta et al. 2003). In addition, the compaction of sediments caused by trampling may also alter the transfer of nutrients and oxygen between the sediment and the overlying water and change sedimentation rates, thus additionally modifying the population dynamics and distribution of animals in the mudflat community (Contessa and Bird 2004). A study on the effects of consistent trampling carried out by Rossi et al. (2007) indicates that it can also change the age class and relative abundance of shellfish species living within affected mudflats (which may have wider ecological consequences by shifting the balance between suspension feeding and deposit feeding organisms). Although they did not specifically measure the time needed for disturbed mudflats to recover, the research by Rossi et al. (2007) suggests that a variety of the physical and ecological effects of trampling and mudflat disturbance may persist beyond the short-term (days and weeks).

Although these impacts to benthic species and mudflat habitats may have significant effects on overall marine species populations or productivity if they occur over a long period of time, on a large spatial scale, or affect a large percentage of the mudflats in an area, the proposed project is short-term and restricted to a small area of mudflats surrounded by hundreds of acres of similar habitat. In addition, TBOC's proposed exclusive use of hand labor and hand tools to extract the fence and berm structure would minimize the disturbance footprint of these activities. TBOC's proposed use of a support vessel to remove the material at high tide would also minimize mudflat disturbance by facilitating direct water access to the work sites and limiting the need to create and use long access trails. Further, removal of the unpermitted structures from mudflat habitat would allow the areas underlying these structures to recover from any ongoing negative effects associated with their presence (such as physical displacement, scouring, accumulation of debris, entrapment and interference with animal movement, alteration of current flows, and interference with the direct connection between deeper sediments, the sediment surface and overlying water). Based on a photo review of the structures by Commission staff (including those shown in **Exhibit 2**), the approximate total footprint of the fence and berm on the mudflats was 5,000 square feet<sup>2</sup>. Therefore, the shortterm disturbance of roughly 2,000 square feet of mudflat habitat would facilitate the longterm recovery of greater than twice as much similar habitat, a significant net benefit.

#### **Marine Debris**

Man-made material released into the marine environment, especially plastics, pose a significant threat to both marine wildlife and habitats. This debris may cause injury and death to marine life by entanglement or ingestion and can negatively affect habitats through spatial displacement and mechanical disturbance. Because the materials used by TBOC to construct the fence and berm structures is primarily comprised of plastics, its continuing presence in Tomales Bay increases the risk of it working loose, dispersing, and becoming marine debris. To address this risk and ensure that complete clean-up and removal of this material is

 $<sup>^{2}</sup>$  Assuming an average width of four feet for the 760 foot long fence (3040 sq. ft.) and 13 feet for the 150 foot berm (1950 sq. ft.), the total footprint would be 4990 sq. ft.

accomplished, the Commission is requiring in <u>Special Condition 1</u> that following the completion of removal work, TBOC submit to the Executive Director a report developed by an independent, third-party inspector documenting the complete removal of the fence and berm structures and all associated debris (including oyster shell, broken PVC piping, and pieces of plastic mesh) from the fence and berm sites and adjacent areas. The Commission is also requiring in <u>Special Condition 1</u> that any material from the fence or berm structures documented in this report as remaining shall be collected by TBOC. While the expeditious removal of this material would address this risk, the collection and removal of the material also has the potential to create and release marine debris if it results in the break-up, fragmentation, or partial destruction of the plastic materials being removed. To address the potential risk that the proposed removal activity would have with regard to the spread and dispersion of debris, the Commission is requiring TBOC in <u>Special Condition 2</u> to carry out cleaning and removal work in a manner that minimizes the release of fugitive materials.

Therefore, the Executive Director finds that the project, as conditioned, will be carried out in a manner in which marine resources are maintained, species of special biological significance are given special protection, the biological productivity of coastal waters is sustained, and healthy populations of all species of marine organisms will be maintained. In addition, the Executive Director finds the project, as conditioned, will maintain the biological productivity of coastal waters and estuarine habitats appropriate to maintain optimum populations of marine organisms. The Executive Director therefore concludes that the proposed project, as conditioned, is consistent with Sections 30230 and 30231 of the Coastal Act.

### **H. VIOLATION**

As discussed above, unpermitted development, including installation and removal of fence and berm structures within Tomales Bay, occurred on the project site from December to March, 2015. Although certain development has taken place at the project site without the benefit of a coastal development permit, consideration of the application by the Executive Director has been based solely upon the Chapter 3 policies of the Coastal Act. Approval of this permit does not constitute a waiver of any legal action with regard to the alleged violations nor does it constitute an admission as to the legality of any development undertaken on the subject site without a coastal development permit. <u>Special Condition 4</u> notifies the Permittee that failure to comply with the special conditions of this permit may result in the institution of an action to enforce those conditions under the provisions of Chapter 9 of the Coastal Act.

# I. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 of the Commission's administrative regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as modified by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The Executive Director incorporates his findings on conformity with the Chapter 3 policies of the Coastal Act at this point as if set forth in full. As discussed above, the development has been conditioned to be found consistent with the policies of the Coastal Act. Mitigation measures, which will minimize all adverse environmental impacts, so that no significant adverse environmental effects are anticipated to be caused by this project, have been required as permit special conditions. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Executive Director finds that the development as conditioned to mitigate the identified impacts can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.

# **ATTACHED EXHIBITS**

- 1. Regional location map
- 2. <u>Project Photos<sup>3</sup> Winter 2014/2015</u>
- 3. <u>Project Photos<sup>3</sup> Spring/Summer 2015</u>

# ACKNOWLEDGEMENT OF PERMIT RECEIPT/ACCEPTANCE OF CONTENTS:

I/We acknowledge that I/we have received a copy of this permit and have accepted its contents including all conditions.

**Permittee's Signature** 

**Date of Signing** 

<sup>&</sup>lt;sup>3</sup> Photos provided in Exhibit 2 and 3 were taken by Richard James. Mr. James approved their use by Commission staff and inclusion in this report.

# Exhibit 1 – Regional Location Map



Exhibit 2 – Project Photos





**Structure 1 – Winter 2014/2015** 

# Structure 2 – Winter 2014/2015





### **Exhibit 3 – Project Photos**



Structure 2 – Spring/Summer 2015