

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

SHORELINE HEARINGS BOARD
STATE OF WASHINGTON

TAYLOR SHELLFISH COMPANY,
INC., a Washington Corporation,

Petitioner,

v.

THURSTON COUNTY, a political
subdivision of the State of Washington,

Respondent

and

ASSOCIATION FOR THE
PROTECTION OF HAMMERSLY, ELD
and TOTTEN INLETS,

Respondent Intervenor.

SHB NO. 12-012

APHETI'S CLOSING ARGUMENT

I. INTRODUCTION

Respondent Intervenor Association for the Protection of Hammersly, Eld, and Totten Inlets ("APHETI") respectfully offers the following closing argument.

This application comes before the Board following a lengthy review by Thurston County's former Hearing Examiner, Tom Bjorgen, resulting in a 93-page decision followed by an 8-page supplemental decision containing, in all, 188 Findings of Fact and 84 Findings of Law. Looking at all of the evidence in the record, the Hearing Examiner

1 found Taylor's analysis of the cumulative impact of the project to be deficient in three
2 areas: dissolved oxygen, the benthic community, and the spread of Gallo mussels. *See*
3 Findings 169-173; 174-176; 179-181. Taylor was given opportunity to provide additional
4 evidence to assuage the record's deficiencies. *See* Finding 189. Taylor chose not to do so.
5 *Id.* Instead, Taylor opted to bring its case before this Board.
6

7 But Taylor's position on appeal is troubling. On one hand, Taylor both complains
8 about the length of time and money it has invested in the EIS process and staunchly
9 defends Thurston County's ultimate Draft and Final EIS. But on the other hand, Taylor
10 seeks now to disavow studies and conclusions reached in the EIS. Without collecting any
11 new data, Taylor wants this Board to now ignore the EIS and instead accept pure
12 conjecture offered by its witnesses Jack Word and Bill Gardner that the project will not
13 significantly impact either benthic resources or dissolved oxygen.
14

15 II. DISCUSSION

16 A. Relevant Law

17 A substantial development permit may be granted only if the proposal is consistent
18 with the SMA and the local shoreline master program. RCW 90.58.140(2)(b). Taylor's
19 appeal boils down to two significant issues:
20

21 First, has Taylor demonstrated that its application complies with Thurston County's
22 SMP? Of primary concern in this appeal are two specific policies within Thurston
23 County's SMP Regional Criteria:

24 "All development within the jurisdiction of this Master Program
25 shall demonstrate compliance with the following policies:

26 ***

27 B. Protection of water quality and aquatic habitat is recognized as a
28 primary goal. All applications for development of shorelines and
use of public waters shall be closely analyzed for their effect on the

1 aquatic environment. Of particular concern will be the
2 preservation of the larger ecological system when a change is
3 proposed to a lesser part of the system, like a marshland or
tideland.

4 F. Applicants for permits shall have the burden of proving that a
5 proposed substantial development is consistent with the criteria
6 which must be met before a permit is granted. In any review of
7 the granting or denial of an application for a permit as provided in
RCW 90.58.180(1), the person requesting the review shall have the
burden of proof.

8 Thurston County SMP, Section 2.V (Regional Criteria).

9 Second, has Taylor demonstrated that its application complies with the requirement
10 in RCW 90.58.020, that the cumulative effects of projects must be considered? *See Hayes*
11 *v. Yount*, 87 Wn.2d 280, 288 (1976). APHETI incorporates by reference the discussion of
12 cumulative effects provided in its Pre-Hearing Brief.

13 The answer to both questions is “no.” Taylor has not proved that its project will
14 protect water quality or aquatic habitat – particularly in relationship to benthic impacts and
15 impacts on dissolved oxygen. Taylor has also not provided the required cumulative
16 impacts analysis.

17
18 **B. Dissolved Oxygen**

19 The EIS recognized the importance of understanding the project’s impacts on
20 dissolved oxygen confirming that “[d]issolved oxygen (DO) is a major area of concern to
21 be examined with aquaculture site plans, both for the good of the environment and the
22 good of the cultured species.” Pet. Ex. 3 (DEIS), p. 3-14. In order to address this “major
23 area of concern” the ITR elected to study the existing conditions at Taylor’s Deepwater
24 Point site and then compare those results to the proposed North Totten Inlet (NTI) site.
25
26
27
28

1 *Id.*; see also “An Assessment of Potential Water Column Impacts of Mussel Raft Culture
2 in Totten Inlet” (Newfields 2009) (part of Pet. Ex. 4) at pp. 18-24.

3 As a result of the analysis, the EIS reached the following conclusions:

4 DO concentrations at the site of the proposed North Totten Inlet
5 mussel farm, as well as from Windy Point on the west side of the
6 inlet, ranged from 7.1 to 14.7 ppm at the surface ..., and 5.9 to
7 13.0 ppm at the maximum depth sampled. The lowest DO
8 concentrations were generally observed during the months of
9 August to November.”

10 Pet. Ex. 3 (DEIS), p. 3-14. Further,

11 Alternative 1 (Preferred): Existing data and the application of
12 predictive modeling indicates that although DO may be significantly
13 reduced within the proposed 58-raft mussel farm, it will generally
14 remain above the biological stress concentration of 5.0 milligrams
15 per liter (mg/L) (parts per million [ppm]). Mathematical models
16 predicted that DO concentrations at the proposed mussel aquaculture
17 site would be generally reduced from 0 percent to 30 percent (70
18 percent maximum), as water passed through the mussel rafts.
19 Changes in DO are likely to be tied to current velocity and seasonal
20 fluctuations in ambient DO (Newfields 2009).

21 Observations from the Deepwater Point site may overestimate low
22 DO events for the site of the proposed North Totten Inlet mussel
23 farm due to lower ambient DO concentrations in the summer period.
24 During periods of low ambient DO (late August and early
25 September), dissolved oxygen concentrations below 5.0 mg/L (ppm)
26 would be expected to persist some distance down-current from the
27 raft edge. However, once the water exits the raft, it will likely
28 recover to ambient DO concentrations within 70 to 200 m (230 to
656 ft) or less, due to entrainment of surrounding waters and from
increased mixing caused by turbulence from the presence of the raft
structure (Newfields 2009). These distances may be somewhat
longer with Alternative 1 (six, 7-raft units and two 8-raft units)
compared to the six, 6-raft units that were modeled from the
Deepwater Point site.

Alternative 1 would create eight “zones of decreased oxygen” 70 to
200+ m (230 to 656 ft+) in length. To make an estimate of
percentage difference between this alternative and Alternative 2, the
surface foot print area of the three-dimensional volume of affected
water can be calculated as a surrogate (since neither scenario was

1 modeled) for the volume of water affected. If it is assumed that
2 Alternative 1 raft units are 10.4 m (34 ft) wide and the “zone” will be
3 a triangle ranging from 70 to 200 m (230 to 656 ft) down-current,
4 that would equate to surface area of 2,906 to 8,288 m² (0.72 to 2.05
5 acres).

6 *Id.*, pp. 3-14 to 3-15.

7 In summary, the EIS informed us that, based on sampling and modeling approved
8 by the ITR, DO levels would be expected to persist below 5.0 mg/L “downstream” from
9 the project for a distance of up to 656 feet, and over an area of up to 2.05 acres, during late
10 summer and fall months. This is profound if for no other reason than the EIS predicts that
11 the project will violate State Water Quality Standards of 7.0 mg/L for Totten Inlet¹ over an
12 area up to 2 acres in size. Regardless of Taylor’s criticism of the calculations performed
13 by the Hearing Examiner, the EIS concludes that water quality standards will be violated.
14 That reason alone is enough to deny Taylor’s project for failing to meet Thurston County’s
15 primary SMP goal of protecting water quality.

16 Taylor now attempts to refute the EIS conclusions concerning DO through the
17 testimony of Mr. Gardiner and Pet. Ex. 26 (the “Rensel Report”).² A careful review of
18 Taylor’s new “proof,” however, demonstrates that it is little more than supposition. The
19 following points are noteworthy:
20

21 **1. No New Data Collected**

22 Page two of the Rensel Report (Pet. Ex. 26) states: “Although the ITR endorsed
23 the study of the Deepwater Point facility, we never envisioned that the data would be
24 directly extrapolated to the proposed NTI site without correctly applying differing
25

26 ¹ See WAC 173-201A-612 (designating Totten Inlet as “extraordinary”) and WAC 173-
27 201A.210(1)(d)(setting lowest 1-day minimum for DO at 7.0 mg/L for waters of “extraordinary quality”).

28 ² While the Report of J.E. Rensel, Ph.D., is written in the first person, Mr. Gardiner testified that it
was his analysis that was used in creating the report.

1 conditions that exist at the two sites.” Considering that the EIS recognized that
2 understanding the project’s impact on DO concentrations was a “major area of concern,”
3 Dr. Rensel/Mr. Gardiner’s statement begs the obvious questions: if additional analysis was
4 needed in order to understand impacts to DO concentrations at the NTI site, why wasn’t it
5 done as part of the EIS? But indeed, as discussed above, the EIS *did* attempt to correlate
6 the two sites and concluded that during late summer and fall months an area of
7 approximately two acres could see dissolved oxygen levels below 5.0 mg/L and certainly
8 below water quality standards. *See* Pet. Ex. 3, pp. 3-14 to 3-17. More importantly, Taylor
9 still has not collected the additional data. Instead, Mr. Gardiner has apparently just re-
10 examined the information already collected and re-packaged the conclusions.

13 2. Lack of tidal current data

14 Despite the EIS’s reliance on the Deepwater Point site, Mr. Gardiner’s current
15 approach is to dismiss that analysis and blame it on differing tidal currents. But
16 Mr. Gardiner now confirms that they do not have current data for Deepwater Point *or the*
17 *nearby Gallagher Cove* sites and therefore must rely on a “surrogate” comparison of
18 current velocity. Pet. Ex. 26, pp. 3-4. But the sediment analysis presented is, at best, non-
19 conclusive. As Mr. Gardiner confirmed, the samples actually taken at the NTI site were all
20 over the map in terms of percentage of sand versus “fines.” If the currents are significantly
21 different at the NTI site versus the Gallagher Cove site, why did Dr. Brooks still report
22 between 37.9% and 56.9% fines at the NTI site?³ If Taylor is going to dismiss actual
23

24
25
26
27 ³ *See* “Baseline Information Describing Sediment Physiochemistry of Totten Inlet and the
28 Macrobenthos of the Proposed North Totten Inlet Mussel Farm” (Brooks, 2005a) (part of Pet. Ex. 5), p. 7,
Figure 17.

1 evidence collected at its other sites, it needs to have actual real data – not surrogate.

2 Taylor offers no new evidence to dispute the conclusions reached in the EIS.

3 **3. Actual data predicts downstream DO concentrations below 5.0**
4 **mg/L even if ambient conditions exceed 9.0 mg/L**

5 While Mr. Gardiner’s new analysis rejects several sources of data in order to
6 conclude that the ambient DO concentrations at the NTI site exceed 9.0 mg/L,
7 Mr. Gardiner confirmed in his testimony that the *actual* data they have from Deepwater
8 Point demonstrates that even if ambient DO levels at NTI exceed 9.0 mg/L, the
9 “downstream” DO levels may drop below 5.0 mg/L. This is confirmed in Figure 2 of the
10 Rensel Report. Each of the data points on Figure 2 is a real sample showing downstream
11 DO levels below 5.0 mg/L. Thus, even if the ambient levels are above 9.0 mg/L, the data
12 still tells us that downstream concentrations will drop below 5.0 mg/L, and certainly below
13 the water quality standard of 7.0 mg/L. Mr. Gardiner could not, however, predict how
14 often this would occur – he simply does not know. Once again, Taylor offers no new
15 evidence to dispute the conclusions in the EIS. The only thing we do know is that, at least
16 in the late summer and fall, DO levels will drop below the 7.0 mg/L state water quality
17 standard *and* below the 5.0 mg/L biological stress level.
18
19

20 **4. The “real” data predicts reduced DO concentrations may exceed**
21 **200 meters “downstream”**

22 Obviously it is critical to understand how widespread the effects of reduced DO
23 concentrations will be. As DNR commented in its review of the DEIS:

24 Dissolved oxygen is estimated to decrease in eight zones near the
25 raft when all 58 rafts for the preferred alternative are installed but
26 are predicted to “generally remain above 5.0 ppm” (biological
27 stress concentrations). However, the technical study (New Fields
28 2009) indicates minimum DO levels of <5.0 are predicted to occur
in the summer and may persist down-current of the raft edge for

1 distances longer than 650 ft. Minimum DO levels occurring below
2 the biological stress conditions with any seasonal regularity for this
3 distance under the preferred alternative would constitute a
4 significant impact and may require mitigation beyond the proposed
5 implementation of Best Management Practices from the Taylor
6 Shellfish Farms Environmental Code of practice (2010) since the
7 preferred alternative contains a configuration consistent with these
8 BMPs.

9 Pet. Ex. 6 (First comment letter after page 2-14 in FEIS).

10 The official FEIS response to this comment attempted to downplay the potential for
11 the plume of reduced DO to extend 200 meters by explaining:

12 Further, in Section 3.1 of the Newfields (2009) report (page 23), it
13 states: "*Nonetheless, DO concentrations appear to rebound to
14 background concentrations within 70 m (230 ft) downstream of the
15 raft. . . . It is possible that the DO concentrations rebound within a
16 shorter distance from the downstream raft face; however, there
17 was no data available between the 5 m and 70 m stations.*"

18 Contrary to WDNR Comment #2B, there are no predictions that
19 the zone of slight oxygen depletion would persist beyond 200
20 meters. As stated above, the DO would quickly return to higher
21 values as the mussel raft plume mixes with other surface waters.

22 Pet. Ex. 6, p. 2-19.

23 But on questioning, Mr. Gardiner (who also authored the referenced Newfields
24 2009 report quoted) was forced to admit that the actual evidence they have does not
25 support the blanket conclusion that it is "possible" DO concentrations will rebound a short
26 distance from the rafts. This is demonstrated in Figure 16 of the NewField 2009 Report.⁴
27 Figure 16 shows that they only collected two samples a distance of 70 meters downstream
28 of the rafts. While one of those samples (August) did rebound to ambient levels, the second
sample (September 16) was actually slightly lower at 70 meters downstream than it was at
3 meters. Thus, except for the single August sample, there is simply no evidence that DO

⁴ "An Assessment of Potential Water Column Impacts of Mussel Raft Culture in Totten Inlet"
(Newfields, November, 2009) (part of Pet. Ex. 4) at p. 24.

1 concentrations actually rebound in close proximity. Instead, the EIS modeling predicts
2 that rafts will affect currents, and thus could entrain reduced DO concentrations for a
3 distance of *at least* 200 meters. *See* Pet. Ex. 3 (DEIS), pp. 3-9 to 3-13. DNR's and the
4 Hearing Examiner's concerns were well-founded. Taylor has failed to demonstrate that its
5 project will not result in widespread impacts from reduced DO concentrations.
6

7 **5. Taylor has not considered cumulative effects**

8 As this Board has repeatedly ruled, cumulative impact analysis for SDP
9 applications are warranted if "there is proof of impacts that risk harm to habitat, loss of
10 community use, or a significant degradation of views and aesthetic values." *Coalition to*
11 *Protect Puget Sound Habitat v. Pierce County*, SHB 11-019 (2012), Conc. 15, *citing*
12 *Fladseth v. Mason County*, SHB No. 05-026 (2010). The evidence demonstrates that there
13 will be at least a "risk of harm to habitat" by the reduction of DO concentrations below
14 state water quality standards and below the 5.0 mg/L "biological stress level." While
15 Taylor's witnesses now opine that there will be no cumulative impacts because, for
16 example, fish can just swim away, Mr. Gardiner confirmed that they have not conducted a
17 cumulative impacts analysis. We simply do not know the cumulative effect on fish and
18 other marine life of having to avoid either existing commercial shellfish operations⁵ or
19 Taylor's new project.
21

22 **C. Benthic Impacts**

23 Taylor's response to the Hearing Examiner's conclusions regarding benthic impacts
24 fails for much the same reason as its response on DO – a lack of data. It is undisputed that
25 the nearby Gallagher Cove operation, while much smaller in size, resulted in large
26

27 ⁵ It is undisputed that commercial aquaculture now covers 85% of the shoreline of Totten Inlet.

1 concentrations of *Beggiatoa*.⁶ Despite the proximity and similar location within Totten
2 Inlet, Pet. Ex. 12, Taylor's only response is their new "surrogate" current "analysis."
3 Again, despite actual data demonstrating a problem with their operation, Taylor has failed
4 to adequately extrapolate that data to its NTI site and demonstrate that the NTI site will not
5 also impact benthic life.

7 III. CONCLUSION

8 The Thurston County Hearing Examiner and County Commissioners got it right.
9 As applicant and appellant, Taylor has the burden of proof. Because Taylor has not
10 demonstrated that its project will meet the primary goal in Thurston County's SMP to
11 protect water quality and habitat, approval of its substantial development permit must be
12 denied. APHETI respectfully requests this Board uphold Thurston County's decision and
13 remand Taylor's application for additional evidence consistent with the Hearing
14 Examiner's decision.
15

16 DATED this 30th day of April, 2013.

17 Respectfully submitted,

18 GENDLER & MANN, LLP

19 
20 _____
21 David S. Mann, WSBA No. 21068
22 Attorneys for APHETI

23 \APHETI\Pleadings - SHB 12-012\20130430 Apheti Closing
24
25

26 _____
27 ⁶ See Resp. Exs. 8A, 8B and 8C and 22. While DNR performed a dive subsequent to APHETI's
28 notification, that dive was conducted *after* Taylor was observed conducting extensive cleanup operations at
the Gallagher Cove site. See Resp. Exs. 13, 14B.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

DECLARATION OF SERVICE

A copy of this document was emailed as per agreement of the parties to the following individuals on April 30, 2013.

Samuel W. Plauché
Michael P. Witek
Plauché & Carr LLP
811 First Avenue, Suite 630
Seattle, WA 98104
billy@plauchecarr.com
mike@plauchecarr.com

Elizabeth Petrich
Jeffrey G. Fancher
Deputy Prosecuting Attorneys
Thurston County Prosecuting Attorney
Civil Division - Glenn Building
2424 Evergreen Park Dr.
Olympia, WA 98502
(Attorneys for Respondent Thurston
County)
PetricE@co.thurston.wa.us
FancheJ@co.thurston.wa.us

I, declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

DATED this 30th day of April, 2013, at Seattle, Washington.



DAVID S. MANN