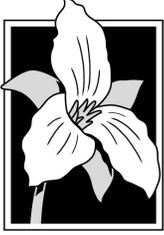


# NORTHWEST ENVIRONMENTAL ADVOCATES



May 2, 2012

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**Re: Oregon Coastal Nonpoint Pollution Control Program; EPA and NOAA's Interim Approval of Agricultural Management Measures for Oregon**

Dear Messrs. Bussell and King:

Oregon has been seeking final approval of its Coastal Nonpoint Pollution Control Program (CNPCP) since July 1995. Over the years, the U.S. Environmental Protection Agency (EPA) and the National Oceanic and Atmospheric Administration (NOAA) (hereinafter collectively "federal agencies") have expressed grave concerns about the sufficiency of Oregon's agricultural nonpoint source program, including its confined animal feeding operations (CAFO) plans and permits, to meet the requirements of the Coastal Zone Act Reauthorization Amendments (CZARA). Eventually the federal agencies gave interim approval to Oregon's agricultural programs as sufficient to meet the requirements of CZARA, an action that became part of the agencies' conditional approval of Oregon's CNPCP.

As you know, Northwest Environmental Advocates (NWEA) challenged the agencies' ability to issue such conditional approvals under CZARA in *Northwest Environmental Advocates v. Locke, et al.*, Civil No. 09-0017-PK. One outcome of the settlement of that case was the federal agencies' agreement to publish on or before November 15, 2013 a proposed decision to approve or disapprove Oregon's program and on or before May 15, 2014 to issue a full and final approval or disapproval. Key to a potential approval of Oregon's CNPCP is completion of the MidCoast "Implementation Ready" Total Maximum Daily Load (IR-TMDL). The MidCoast is a pilot of a new type of TMDL required under the settlement to ensure that the Oregon Department of Environmental Quality (DEQ) both has and uses legal authority to ensure implementation of forest practices in the basin sufficient to meet load allocations and water quality standards over and beyond the practices prescribed by the Oregon Department of Forestry, the rules of the latter having been found by the federal agencies to be inadequate to protect water quality.

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We are writing today to question the federal agencies' interim finding as to the sufficiency of Oregon's agricultural programs and to strongly urge you to work with Oregon, both within and outside the context of the *NWEA v. Locke* settlement, to remedy the weaknesses of both Oregon's agricultural programs and the federal agencies' interim findings on those programs in order that you may make a final and defensible approval of Oregon agricultural management measures. In Part I of this letter, we discuss what the law requires. Part II traces the history of the federal agencies' interim approval for Oregon's agriculture program and its heavy reliance on the use of TMDLs and the Oregon Department of Agriculture's (ODA) allegedly intersecting plans and rules including the mistaken belief that the ODA plans are enforceable. In light of ODA's self-limited enforcement authorities, in Part III, we discuss DEQ's enforcement authority. In Part IV we discuss Oregon's failure to regulate nutrients, in Part V Oregon's inadequate regulation of confined animal feeding operations (CAFO), and Part VI the lack of adequate pesticide management measures.

**I. Background on the CZARA Statute, Oregon's Agricultural Program, and the NWEA Settlement**

CZARA calls for "[t]he implementation and continuing revision from time to time of additional management measures . . . that are necessary to achieve and maintain applicable water quality standards under section 1313 of Title 33 and protect designated uses."<sup>1</sup> This outcome is assured by at a minimum compliance with the section (g) management measures<sup>2</sup> (hereinafter "Guidance") as well as such "additional management measures" as may be required to meet state water quality standards adopted under the Clean Water Act (CWA). It is important to note that meeting water quality standards includes fully supporting designated and existing uses in addition to meeting numeric and narrative criteria.<sup>3</sup> Therefore, providing water quality that fully protects threatened and endangered species, such as the Oregon Coast (OC) coho, is part of the legal definition of meeting water quality standards for the area covered by the CZARA boundary.

Agriculture has been implicated in the decline of OC coho. For example, the Biological Review Team convened by the National Marine Fisheries Service (NMFS) for this species "noted that the legacy of past forest management practices combined with lowland agriculture and urban development has resulted in a situation in which the areas of highest habitat capacity (intrinsic potential) are now severely degraded."<sup>4</sup> Likewise, the recent final rule on the threatened listing

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<sup>1</sup> 16 U.S.C. § 1455b(b)(3).

<sup>2</sup> As required by CZARA, 16 U.S.C. § 1455b(g), EPA issued *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* in January 1993 (hereinafter "Guidance").

<sup>3</sup> 40 C.F.R. §§ 131.6, 130.7(b)(3); *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, 114 S.Ct. 1900 (1994).

<sup>4</sup> Stout, H.A., et al., Scientific conclusions of the status review for Oregon Coast coho salmon (*Oncorhynchus kisutch*), Draft report from the Biological Review Team, Northwest Fisheries Science Center, May 20, 2010 at 95.

of the OC coho concurs.<sup>5</sup> The BRT identifies stream complexity as the most pervasive primary limiting factor for this species with water quality being the most pervasive secondary limiting factor.<sup>6</sup> Specifically, NMFS has recognized that restoring complexity and water quality to agricultural lands is key to coho recovery due to the value of lowlands:

[W]e believe that even larger benefits [of increased overwinter survival of coho juvenile from habitat restoration] could be derived from projects to increase the amount of available winter rearing areas in the lower reaches of coastal basins. These areas, where historically the largest numbers of juvenile coho salmon probably overwintered, are now used primarily for agricultural production. Many of the streams have been channelized and the sloughs and wetlands drained, resulting in large-scale reductions in potential overwinter rearing space.<sup>7</sup>

Oregon's agricultural program, as administered by the ODA and DEQ, must be evaluated against this legal and scientific backdrop. This program consists of two elements administered by the Oregon Department of Agriculture (ODA). The first is an Agricultural Water Quality Management Area Plan (AWQMAP), an entirely voluntary plan created by a local committee. In theory, these AWQMAPs are reviewed biennially while in practice the reviews are far less frequent. Such biennial reviews may be as cursory as a single meeting of the committee in which no changes are proposed. The second element is the ODA basin rules that set out the minimum prohibited conditions for landowners. The rules are extremely vague and are rarely revised. As ODA describes the program on its website:

The AgWQM area rules are developed along with, and are a companion to, each individual AgWQM area plan. Each plan contains recommendations and suggestions to improve water quality, and are not enforceable. Landowners and operators must comply with the AgWQM area rules. A good rule of thumb to remember is "the rules are enforceable, the plan is not."<sup>8</sup>

In theory the identification of impaired waters and the subsequent development of TMDLs by DEQ under section 303(d) of the CWA should result in more specific practices and requirements to ensure that nonpoint source pollution from agricultural lands meets the load allocations set out in the TMDLs or begins to address the identified impairments. In reality, the TMDLs themselves

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<sup>5</sup> 76 Fed. Reg. 35755, 35766 (June 20, 2011) ("Agricultural activities have removed stream-side vegetation. Building of dikes and levees has disconnected streams from their floodplains and resulted in loss of natural stream sinuosity. Stormwater and agricultural runoff reaching streams is often contaminated by hydrocarbons, fertilizers, pesticides, and other contaminants. In the Umpqua River basin, diversion of water for agriculture reduces base stream flow and may result in higher summer stream temperatures.").

<sup>6</sup> See, e.g., Stout et al., at 62.

<sup>7</sup> M.F. Solazzi, et al., Effects of increasing winter rearing habitat on abundance of salmonids in two coastal Oregon streams, *Can. J. Fish. Aquat. Sci.* 57: 906–914 (2000) at 913 (citations omitted) available at <http://userwww.sfsu.edu/~efc/classes/pa/fish1.pdf>.

<sup>8</sup> ODA website at [http://www.oregon.gov/ODA/NRD/water\\_quality\\_faqs.shtml](http://www.oregon.gov/ODA/NRD/water_quality_faqs.shtml).

do not provide any additional information on needed implementation measures, and the TMDL implementation plans, known as Water Quality Management Plans (WQMP) merely refer back to existing agriculture plans and rules. DEQ does not regulate agricultural sources directly although it has the authority to do so.

It is our understanding that the federal agencies' view is that under CZARA voluntary programs can suffice to address water quality problems so long as the state also has and will use backup legal authority to regulate nonpoint sources, it can demonstrate how that legal authority will be triggered and provide assurances that it will use the authority, and that it can demonstrate that it actively promotes the use of the preferred voluntary approach. For the last of these, the federal agencies have drawn a distinction between a state's being committed to using a voluntary program to meet water quality and its being committed to a voluntary program (regardless of the outcome). With regard to agriculture's impacts on water quality, evidence to date points to Oregon's commitment being of the latter variety, namely that the state is committed to whatever is voluntary but is not equally committed to making sure that its programs are effective in assuring the attainment and maintenance of water quality standards impacted by agricultural activities. Nor has Oregon, given the passage of time since this process started, demonstrated how failures of its voluntary agricultural program have been or will be dovetailed with enforcement actions taken by any state agencies' legal authorities which, ostensibly, is the purpose of the back-up legal authority that NOAA and EPA have required.

In demonstrating the weaknesses in the federal agencies' interim approval and of Oregon's agricultural programs, it is our hope that both can be overcome. In the settlement of *NWEA v. Locke*, Oregon committed to addressing the outstanding forestry issues through a process that should have the effect of at least partially addressing nonpoint sources of agriculture. This is a good start but only if the federal agencies are clear with Oregon that this process is as important to its final findings on agriculture as they are on forestry. DEQ has already made a commitment to use the MidCoast TMDL pilot IR-TMDL for all nonpoint sources, including agriculture. Specifically, in the settlement, DEQ stated that it would "specifically identify *significant nonpoint sources*, including significant forestry sources," "establish[] enforceable load allocations in the Implementation Ready TMDL for all *significant nonpoint sources*, including significant forestry nonpoint sources," "develop[] 'safe Harbor' BMPs for the load allocations established for the *significant nonpoint sources*, including significant forestry nonpoint sources," and "issu[e] an order to *significant sources*."<sup>9</sup> Moreover, in its commitment letter, DEQ agreed to use this new TMDL approach for bacteria TMDLs in the MidCoast, which is an agricultural issue, not a forestry issue. Nevertheless, as the federal agencies have already provided an interim approval of agriculture management measures, we wish to bring to your attention the important role the MidCoast IR-TMDL should have in addressing the significant weaknesses in Oregon's CNPCP with regard to agricultural management measures and to urge you to highlight its importance to the State of Oregon's obtaining final approval of its program.

In fact, in order to emphasize the importance to DEQ of the importance of its actions in the next nine months with regard to agriculture, we urge EPA and NOAA to immediately rescind your existing interim approval of the Oregon CNPCP with regard to agricultural management

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<sup>9</sup> *Northwest Environmental Advocates v. Locke, et al.*, Civil No. 09-0017-PK, Final Settlement Agreement, Exhibit F, Letter from Neil Mullane, DEQ, to Michael Bussell, EPA, and John King, NOAA, July 26, 2010 (emphasis added).

measures because, as the remainder of this letter will demonstrate, that approval is based on a fundamental misunderstanding of Oregon's law and because there are fundamental flaws in the federal agencies' reliance on Oregon's voluntary program and illusory back-up enforcement authority.

## **II. The Interim Approval of Oregon's Nonpoint Agricultural Management Measures**

On January 13, 1998, EPA and NOAA found many components of Oregon's CNPCP deficient. Oregon responded with new information, ushering in a decade of wishful thinking. NOAA and EPA responded to Oregon's subsequent, April 1999 submittal,<sup>10</sup> by noting that, with regard to hydromodification, the CZARA requirements "may have been met" because "eroding stream banks in the 6217 management area are primarily due to forestry and agricultural practices which result in the removal of vegetation from riparian areas."<sup>11</sup> The agricultural practices the federal agencies concluded were not a problem because

Other important activities noted in the Executive Order [No. EI00-01, signed by Governor Kitzhaber, January 8, 1999] include the requirement that under SB 1010 ODA will adopt Agricultural Water Quality Management Area Plans (AWQMAPs) for Tier I and Tier II watersheds by the end of 2002. The AWQMAPs will be designed and implemented to meet load allocations for agriculture needed to achieve state water quality standards. ... ODA and ODF will evaluate the effectiveness of these measures in achieving water quality standards on a regular basis and implement any changes required to meet those standards.<sup>12</sup>

This wishful thinking contrasted with the federal agencies' concerns that the AWQMAPs "contain no assurances that any on-the-ground measures will actually be implemented," that "the AWQMAPs do not tell the reader the extent to which landscape conditions will change," and that "in the plans we've seen so far [it's not clear] whether watershed analysis for the TMDL will be used to help focus agricultural efforts nor whether those efforts will be aimed at the agricultural load allocation defined in the TMDL."<sup>13</sup> Nor did the optimistic view of Oregon's programs mesh with the agencies' conclusion in 2002 that the state's agricultural program did not ensure conformity with the Guidance because, while Oregon had confirmed it had enforceable authority over nonpoint sources, it had not demonstrated the "ability of the authority to ensure implementation."<sup>14</sup> Accordingly, the federal agencies established conditions to address this

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<sup>10</sup> A Pollution Prevention and Control Program for Oregon's Coastal Waters: Supplemental Information in Response to the Federal Findings of January 1998, April 1999.

<sup>11</sup> Memorandum, NOAA and EPA Region 10 Comments on Information Submitted in April 1999, October 12, 1999.

<sup>12</sup> *Id.* at 2-3.

<sup>13</sup> EPA's Primary Concerns regarding Oregon Agricultural Water Quality Management Area Plans under SB 1010, June 1999.

<sup>14</sup> Submittal of Additional Information on the State's Measures for Agricultural Sources in response to Federal Findings of January 1998, December 31, 2002 (hereinafter "2002

weakness, including that Oregon would, within one year, ensure compliance with the Guidance grazing requirements, that the Guidance measures would be incorporated into the Oregon Agricultural Water Quality Management Area Plans (AWQMAP), that Oregon would ensure sufficient plans and equipment calibration to implement nutrient measures, and that Oregon would put in place a process to identify practices to meet the pesticide management measures. The federal agencies placed a heavy emphasis on the success of Oregon's AWQMAP approach, run by the Oregon Department of Agriculture (ODA), and its associated basin rules, while expressing concerns about its likely efficacy:

Individual landowners are required to comply with the provisions of the AgWQMPs. This program appears promising, and implementation of AgWQMPs has the potential to ensure implementation of the management measures. The content of the AgWQMPs, their linkage to the 6217 management measures, and their effectiveness, are not yet known.<sup>15</sup>

Oregon encouraged the impression that the ODA basin rules closely followed the far more detailed plans, upon which the federal agencies pinned so much of their hopes. For example, Oregon told the agencies that "prohibited and desired conditions are drafted in Agricultural Water Quality Management Plans (AWQMP) which are then codified in Oregon Administrative Rule."<sup>16</sup> Oregon also implied that enforcement was possible with regard to the plans by stating that "[e]nforcement for compliance with the AWQMPs is initiated on a complaint basis," implying that the plans could in fact be enforced, while it clarified that "compliance with local riparian rule" will be used for enforcement,<sup>17</sup> a detail apparently lost on the federal agencies as will be seen below. And Oregon suggested that compliance would be based on science:

Using protocol established by ODA, they will determine whether current conditions indicate that the riparian functions of shade, filtration, and erosion control are being preserved and enhanced so that the site potential for providing these functions will be reached.<sup>18</sup>

As will be demonstrated below, Oregon's use of the phrase "site potential," which implies some sort of scientifically-based assessment, is highly misleading and there is no evidence the referenced protocol is in place. Even if there is an ODA protocol for determining violations, there is no protocol for determining site potential conditions a landowner should have in place to ensure that agricultural lands do not contribute to violations of water quality standards. In any case, the starting point for appropriate agricultural management measures sufficient to meet

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Submittal") at 6.

<sup>15</sup> *Id.* at 6.

<sup>16</sup> A Pollution Prevention and Control Program for Oregon's Coastal Waters; Supplemental information in response to the Federal Findings of January, 1998, Measures for Protecting and Restoring Riparian Areas, January 2003 (hereinafter "2003 Submittal") at 10.

<sup>17</sup> *Id.* at 11.

<sup>18</sup> *Id.*

water quality standards is largely tied to the Total Maximum Daily Loads (TMDL) required by section 303(d) of the CWA.

In 2008, the federal agencies agreed that the Oregon approach was flimsy at best. First they noted that Oregon's Goal 5 land use planning requirements upon which the state otherwise relies to address CZARA's riparian protection goals explicitly does not apply to agriculture (or forestry). With that backdrop, they then reiterated the importance of the TMDL program to achieve riparian protection:

Oregon's TMDL program can also play an important role in riparian protection. All the basins within the 6217 boundary have water quality impairments for temperature. To address this impairment, each designated management agency (DMA) within the listed sub-basins must develop TMDL Implementation Plans for temperature. Riparian protection and restoration are important components for reducing temperature impairments as riparian areas provide needed shading to waterways. Several TMDL Implementation Plans that have been completed are consist[ent] with the (g) guidance for riparian protection. However, since the TMDL Implementation Plan guidance does not recommend specific riparian protection practices to address temperature impairments or even reference the (g) guidance, there is no guarantee that all subsequent TMDL Implementation Plans would be consistent with the (g) guidance for riparian protection. NOAA and EPA strongly encourage Oregon to consider revising the TMDL Implementation Plan guidance to, at a minimum, require DMAs within the 6217 management area to consult the (g) guidance and incorporate practices consistent with the (g) guidance as appropriate, when developing Implementation Plans.<sup>19</sup>

Oddly, however, this discussion includes references to "TMDL Implementation Plans" which are merely the same agricultural (and forestry) practices that are in place prior to the issuance of a TMDL. To the extent that there may be additions to the voluntary agricultural plans following TMDL development, these additions are not enforceable by ODA, as discussed below. And neither agriculture (nor forestry) has defined riparian protections that are sufficient to meet Oregon's temperature standards. The federal agencies' having withheld approval for Oregon's forestry provisions for riparian protection, which are explicit and regulatory but inadequate to meet water quality standards, while granting interim approval for the state's agricultural provisions which are purely voluntary and ambiguous – and therefore even less likely to meet water quality standards – suggests a double-standard for protecting riparian areas from the ravages of the state's two major nonpoint sources. In fact, the Oregon Plan acknowledged the significantly low levels of shade on agricultural lands.<sup>20</sup> Therefore, to in addition conflate the

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<sup>19</sup> NOAA and EPA Preliminary Decisions on Information Submitted by Oregon to Meet Coastal Nonpoint Program Conditions of Approval, June 12, 2008 at 8.

<sup>20</sup> Anlauf, K. J., K. K. Jones, and C.H. Stein. 2009. The Status and Trend of Physical Habitat and Rearing Potential in Coho Bearing Streams in the Oregon Coastal Coho Evolutionary Significant Unit. OPSW-ODFW-2009-5, Oregon Department of Fish and Wildlife, Salem, at 6-7, available at <http://oregonstate.edu/dept/ODFW/freshwater/inventory/pdffiles/OPHabitatCoastalESU2009.pdf>. ("Variation among land use categories was large. Shade levels were low in agricultural and urban land uses, with a majority of the streams in the low category. Shade was

Guidance measures with those management measures needed to meet TMDL load allocations for nonpoint sources is simply and obviously incorrect.

#### A. Role of TMDLs and Agricultural Practices

In reviewing the state's agricultural program, EPA and NOAA relied on Oregon assertions, not only that TMDLs would be completed at a rapid pace but that they would be effectively implemented. Citing the Oregon Plan for Salmon and Watersheds (Oregon Plan),<sup>21</sup> the state assured the federal agencies that "DEQ is committed to having federally approved TMDLs on all waterbodies listed on the 1998-303(d) list by the end of the year 2007,"<sup>22</sup> and that each TMDL would be implemented "immediately upon its approval."<sup>23</sup> As a result, Oregon was able to claim that it would have "full implementation of the CZARA management measures by 2004."<sup>24</sup> From a water quality standpoint, the Oregon Plan promised to reach the following benchmarks in coastal watersheds by the year 2012: 45 percent of watersheds meeting temperature criteria, 85 percent reaching dissolved oxygen criteria, and 40 percent reaching sediment criteria.<sup>25</sup> As EPA noted in response, "[t]he TMDL schedule is also a major driver for the program." Citing commitments made in settlement of litigation on Oregon's TMDL program, EPA further observed that a "particularly strong component of the program is inclusion of implementation plans as water quality management plans in NPS [nonpoint] TMDLs." However, in a note of caution, EPA stated that "DEQ's role in NPS control from agriculture and forestry should be more clearly and prominently featured. . . . That linkage [between the state agencies] is a linchpin for effective nonpoint source control and therefore merits emphasis."<sup>26</sup> EPA's concerns about DEQ's involvement in nonpoint source control were entirely well founded. Oregon has failed to

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highest in forested landscapes. The number of large conifers in agricultural and urban land uses was extremely low, and few streams were in the high category among any land uses types." "Urban and agricultural lands have the lowest capacity for winter rearing habitat.")

<sup>21</sup> See, e.g., Oregon website at <http://www.oregon-plan.org/>.

<sup>22</sup> 2002 Submittal at 8. DEQ has not met this projected deadline. For example, the MidCoast basin had numerous segments listed on the 1998 303(d) list of impaired waters and no TMDLs have yet been developed for that basin.

<sup>23</sup> Memorandum from Dov Weitman, Chief, Nonpoint Source Control Branch to Gary Voerman, Manager, EPA Region X Natural Resources Unit, Re: Oregon's February 2000 Draft Nonpoint Source Management Plan Upgrade (hereinafter "2000 Upgrade") March 23, 2000 at 2.

<sup>24</sup> *Id.*

<sup>25</sup> Oregon Coastal Nonpoint Program 15 year Plan, attachment to the 2000 Review. These can be compared to the 1997 benchmarks of 18%, 73%, and unknown percent (15% in 2007) for temperature, dissolved oxygen, and sediment respectively.

<sup>26</sup> Review of the Draft Oregon Nonpoint Source Control Program Plan, 2000 Update, from Teena Reichgott, EPA Region X NPS Program Coordinator to Roger Wood, DEQ (hereinafter "2000 Review") May 12, 2000 at 2.

develop TMDLs on the schedule promised.<sup>27</sup> The implementation plans for agriculture (and forestry) in the state's TMDLs are no more than the programs already used by the ODA (and ODF) prior to a TMDL. And there is no evidence that the programs, with or without the TMDLs, has resulted in the attainment of the Oregon Plan benchmarks or even any progress towards meeting them. It is not possible to know whether progress has been made because Oregon does not track either its implementation or any associated water quality benefits.<sup>28</sup>

**1. ODA Plans and Rules are Completely Disconnected from DEQ TMDLs**

In its 2002 submittal, DEQ also provided supplemental information to the federal agencies about the legislative history of Senate Bill 1010, the Agricultural Water Quality Management Act which authorizes the ODA to issue plans and rules to meet water quality standards. DEQ stated that AWQMAPs would be used to meet TMDLs and water quality standards for agricultural lands and that AWQMAPs and rules "are reviewed on a biennial basis," implying that the load allocations for nonpoint sources contained in TMDLs would be incorporated in post-TMDL updates of ODA rules and plans. In fact, the rules and plans for CNPCP watersheds are not reviewed every two years, as demonstrated by information on ODA's website.<sup>29</sup>

<b>AWQMAP</b>	<b>plans and rules adopted</b>	<b>reviews conducted</b>
Bear Creek	1998	2002, 2004
Coos & Coquille	2002	2004, 2006, 2008
Inland Rogue	2001	2004, 2007
Mid Coast	2002	2004, 2008
North Coast	2000	2004, 2007
Umpqua	2001	2003, 2005, 2007

More important, none of these reviews of coastal watershed AWQMAPs have led to changes in ODA's basin rules.<sup>30</sup>

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<sup>27</sup> See Oregon DEQ website at <http://www.deq.state.or.us/wq/tmdls/basinlist.htm>.

<sup>28</sup> Once a TMDL is completed for a basin, DEQ does not continue to evaluate the data against the standards to identify impairments or trends in water quality. EPA likewise did not review temperature data for subbasins currently covered by a TMDL. See Enclosure 2: EPA 303(d) Listing Methodology at 16, available at [http://www.epa.gov/region10/pdf/water/303d/oregon/Final\\_Enclosure\\_2\\_EPA\\_List\\_Methodology.pdf](http://www.epa.gov/region10/pdf/water/303d/oregon/Final_Enclosure_2_EPA_List_Methodology.pdf).

<sup>29</sup> ODA website, [http://oregon.gov/ODA/NRD/docs/pdf/plans/pln\\_rl\\_hstry.pdf](http://oregon.gov/ODA/NRD/docs/pdf/plans/pln_rl_hstry.pdf).

<sup>30</sup> *Id.*, see footnotes to chart.

In its CZARA supplements, DEQ also pointed to its Memorandum of Agreement (MOA) with ODA as ensuring collaborative efforts between the two agencies.<sup>31</sup> There is, however, no evidence that the existing MOA has resulted in any improvement of water quality, implementation of management measures on agricultural lands, or responses by ODA to load allocations in any DEQ-issued TMDLs. Even with the backdrop of DEQ's recent CZARA settlement commitments that extend to agriculture as noted above, discussions over the last months regarding a revised MOA do not promise any improvement. The state, led by the Governor's office, recently engaged in interactions with stakeholders on the issue of revising the MOA, at the conclusion announcing that the new document will include very little in the way of specifics and nothing whatsoever with regard to the IR-TMDLs with which DEQ has committed to address the outstanding forestry concerns under CZARA. Given DEQ's commitment to treating nonpoint sources of agriculture in the same fashion as forestry, this is both puzzling and troubling. It is also a very strong indication that the federal agencies' concern that there is no linkage between DEQ's TMDLs and the ODA programs was well placed. Given that DEQ plays no role whatsoever in ensuring sufficient agricultural practices are used by landowners, including using its own backup legal authority, that amounts to no linkage at all.

DEQ's 2002 CZARA submittal also pointed to use of TMDLs for sediment to "have [a] bearing in addressing erosion problems in a designated AgWQMP," and generally alleged that areas with erosion problems will be identified and addressed.<sup>32</sup> With regard to nutrients, where TMDLs have been developed, DEQ asserted that the AWQMAPs "*will* address agricultural conditions that contribute to nutrient problems"<sup>33</sup> in contrast to an otherwise voluntary nutrient program.<sup>34</sup> There is, however, no evidence that the completion of TMDLs has had any effect whatsoever on the control of any type of pollutant by ODA, and DEQ has exerted no authority over agricultural nonpoint sources regardless of the existence of a TMDL.

## **2. ODA Plans and Rules Do Not Result in Widespread Implementation of Guidance Measures or Additional Management Measures Needed to Meet Water Quality Standards**

In September 2002, in response to the DEQ submittal, the federal agencies correctly concluded that "the existing AWQMPs do not ensure the widespread and comprehensive implementation of

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<sup>31</sup> Memorandum of Agreement Between the Oregon Department of Agriculture and the Oregon Department of Environmental Quality concerning Water Quality Limited Waterbodies (303(d)), Total Maximum Daily Loads (TMDLs) and Agricultural Water Quality Management Area Plans (AWQMAPs), June 6, 1998. The MOA contains virtually no information.

<sup>32</sup> 2002 Submittal at 11-12.

<sup>33</sup> *Id.* at 13 (emphasis added).

<sup>34</sup> *Id.* at 12 (emphasis added). DEQ described Oregon's nutrient management as purely voluntary with statements such as "AgWQMPs *can* address nutrients" and "ODA ... *can* promote nutrient application at agronomic rates," and "management measures *can* be developed with Local Advisory Committees and considered for inclusion in plan revisions as recommended approaches."

all the [Guidance] management measures.”<sup>35</sup> NOAA and EPA went on to comment that the biennial revision of the plans could be a “viable pathway toward meeting conditions” if the revisions “include[d] more comprehensive incorporation of these management measures.”<sup>36</sup> In fact, since 2008, as demonstrated above, none of the coastal AWQMAPs have been updated and no rules for those watersheds have ever been amended since they were initially adopted, whether or not TMDLs have been developed subsequently. We are not able to determine if the biennial revisions of the AWQMAPs that did take place since 2002 in fact included more comprehensive management measures than were initially included. However, it appears that the federal agencies were satisfied with the incorporation, into either AWQMAPs or plan appendices, of the Guidance measures, even while they remain unincorporated into the rules which, as we will discuss below, are the only enforceable parts of Oregon’s agricultural program.

We are equally unable to discern how the federal agencies were able to determine that even the widespread use of the Guidance measures, were they to be used on agricultural lands in Oregon, would be sufficient to result in the attainment and maintenance of water quality standards. There is nothing in the record that discusses the sufficiency of the Guidance measures, particularly in light of Oregon’s water quality standards for temperature to support threatened and endangered cold-water species, to meet the statutory requirement for management measures “necessary to achieve and maintain applicable water quality standards.”<sup>37</sup> That the Guidance measures are not likely sufficient for agricultural lands to meet standards seems obvious if for no other reason than the federal agencies found the buffers provided by Oregon’s forested lands inadequate to meet water quality standards and *there are no buffers required for agricultural lands*. In addition, Oregon’s most widespread water quality impairment is temperature and the Guidance does not even include temperature among the pollutants that cause agricultural nonpoint source pollution.<sup>38</sup> Protection of riparian areas, which is key to protecting temperature, falls under the agricultural management measures as well as those for restoration of wetland and riparian areas. But in neither case did the federal agencies appear to test the hypothesis that full implementation of the Guidance measures would result in sufficient shade, width:depth ratios (affected by sedimentation), sinuosity, groundwater, etc. to restore impaired temperatures and provide thermal refugia to protect the designated uses, as specifically required by CZARA.

From DEQ’s perspective, TMDLs would be used to determine whether additional management measures would be needed:

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<sup>35</sup> Memorandum from Bill Millhouser, Pacific Regional Manager, OCRM Coastal Programs Division et al. To Amanda Punton, Oregon Coastal Management Program et al., Re: Comments on April 2002 Submittal – Agricultural Management Measures (hereinafter “2002 Comments”) September 10, 2002.

<sup>36</sup> *Id.* at 3.

<sup>37</sup> 16 U.S.C. § 1455b(b)(3).

<sup>38</sup> Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters, EPA 840-B-92-002, January 1993, available at <http://www.epa.gov/owow/NPS/MMGI/Chapter2/ch2-1.html#Pollutants> (temperature is mentioned as one of many habitat impacts).

The need for additional management measures will be determined through three ongoing programs: 1) Water quality monitoring linked to updates of the 303(d) list and TMDL implementation plans; 2) Evaluation of salmonid recovery efforts through the Oregon Plan; and 3) Watershed Assessments sponsored by the Oregon Watershed Enhancement Board. . . . Identification and implementation of additional management measures are expected to span the full fifteen year planning period.<sup>39</sup>

The federal agencies, on the other hand, never specified who would evaluate whether the Guidance measures were adequate to meet water quality standards, how this would be done and when, and whether there would be any federal oversight of this rather critical determination. (At far back as 1996, ODA suggested that its local committees would: “In regard to the protection and restoration of riparian areas, ODA will use the SB 10101 planning process to address those issues as they related to water quality protection.”<sup>40</sup>) Likewise, the federal agencies did not appear to question Oregon’s assertion that the various cited processes, including the development of TMDLs, would in fact identify whether additional management measures were needed even though nothing in the 303(d) listings, TMDLs, or state assessments and evaluations would lead to a finding on the need for additional management measures other than the base fact that water quality was not improving. Without a methodology and timeline for assessing lack of improvements, there would be no reason for Oregon to identify the failure of the Guidance measures to produce results sufficient to meet water quality standards. Yet for reasons unknown, the federal agencies simply accepted the assertions that future actions would address the need for additional management measures.

### **3. TMDLs Do Not Result in Widespread Implementation of Guidance Measures or Additional Management Measures Needed to Meet Water Quality Standards**

There are other disconnections between TMDLs and ODA’s rules and plans. While DEQ does use impaired waters from its CWA section 303(d) list to develop TMDLs that apply to all waters in a basin for temperature, the agency does not always take that approach for other pollutants or parameters. For example, while the Midcoast demonstration IR-TMDL will address all basin waters for temperature and bacteria, the sediment/biocriteria portion of the TMDL will apply to a limited number of watersheds within the basin where waters are identified as impaired for sediment (yet many more are limited for biocriteria). This limited approach is consistent with the CWA but it works against using TMDLs for CZARA purposes to assure widespread adoption of required management measures needed to *maintain* water quality standards, a concern shared by the federal agencies.<sup>41</sup> It is, in fact, precisely the view set out by the federal agencies in their 2002 comments to DEQ:

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<sup>39</sup> Oregon Coastal Nonpoint Program 15 year Plan, attachment to the 2000 Review.

<sup>40</sup> Letter from Marc Peters, ODA, to Patty Dornbusch, NOAA/OCRM, December 4, 1996 at 4 (emphasis omitted)(hereinafter “Marc Peters letter”).

<sup>41</sup> In fact, the mere delay in producing TMDLs prevents DEQ from assuring the maintenance or attainment of water quality standards given its refusal to use any other mechanism to achieve basic nonpoint source controls.

We are also concerned that, since the impetus for this [AWQMAP] planning process is driven by TMDLs, people may assume that measures need only to be implemented in specific areas where water quality is degraded. Site-specific implementation triggered by degradation rather than implementation across the landscape, through the AWQMAP, would not meet the goals of pollution prevention and keeping waters off the list. Also, if a specific parameter is not listed on the 303(d) list, the AWQMAP may not include the related management measure, even when that measure affects other listed parameters (e.g., nutrients not listed due to lack of data, but affect listed parameters such as algal growth, chlorophyll a, dissolved oxygen and pH).<sup>42</sup>

At the time, the agencies were concerned with management measures being linked to 303(d) listed water quality parameters. In retrospect, they should also have been concerned with DEQ's ability to even generate a timely and complete 303(d) list.<sup>43</sup>

In 2002, the federal agencies also expressed doubts about how water quality problems would be identified and rectified. Regarding erosion and sediment control, citing Oregon's statement that farmers would be responsible for both identification and prevention, NOAA and EPA stated such an approach

does not indicate how problems will be identified. Some AWQMAPs, such as the one from Inland Rogue, have criteria describing what would be considered excessive soil erosion, but does not detail the process for determining whether or not management measures would be helpful. If the Oregon CNPCP plans to rely on voluntary programs to implement the program, a backup water quality authority is necessary.<sup>44</sup>

By mid-2003, EPA and NOAA noted that having thought previously that the biennial revision to AWQMAPs would link those plans with TMDL load allocations, the MOA between ODA and DEQ "potentially ensures that ODA will evaluate 1010 plans to assure attainment of DEQ's load allocation for agriculture."<sup>45</sup> It was a tenuous and weak link between the regulatory TMDLs and

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<sup>42</sup> 2002 Comments at 3.

<sup>43</sup> Oregon's last complete, albeit untimely, list was submitted to EPA on May 23, 2006. DEQ website at <http://www.deq.state.or.us/wq/assessment/rpt0406.htm>. DEQ failed to submit a list in 2008 and 2010, managing to submit an incomplete list on May 23, 2011. DEQ website at <http://www.deq.state.or.us/wq/assessment/2010Report.htm>. Despite DEQ's having taken five years, the resulting list was so poor that EPA was forced to disapprove Oregon's submittal for its failure to list waters. As of March 15, 2012, EPA has proposed to add 1004 new listings for bacteria, chlorophyll a, dissolved oxygen, pH, sedimentation, temperature, total dissolved gas, toxics, and impaired biological use. EPA website at <http://yosemite.epa.gov/R10/water.nsf/Public+Notices/oregon303d>.

<sup>44</sup> 2002 Comments at 4-5.

<sup>45</sup> Memorandum from Amy Carter, NOAA to Amanda Punton, Oregon Coastal Management Program Re: Comments on the "Submittal of Additional Information on the State's

the voluntary plans, yet by late 2003 EPA and NOAA were comforted by their conclusion that Oregon had incorporated the Guidance management measures into the AWQMAPs either directly in the plans (e.g., the North Coast Basin) or in an appendix to the plans (e.g., the Umpqua Basin). Having ascertained that goal had been met, the federal agencies moved on to “[t]he main issue we still need to resolve is whether or not the [management measures] placed in the appendix of the 1010 plans are suitable and enforceable.”<sup>46</sup> Despite an EPA staffer’s having noted in late 2003 the need to “include an additional note in the ag section pointing out that plans are voluntary, rules are mandatory,” NOAA asked its general counsel whether the AWQMAPs were enforceable and whether it mattered if the Guidance measures were in the appendices or the body of the plan. Oddly, the plain statutory answer escaped the NOAA general counsel who told the staff that the AWQMAPs were, indeed, enforceable, regardless of the location of the Guidance measures.<sup>47</sup>

**B. Contrary to the Federal Agencies’ Finding, ODA AWQMAPs Are Not Enforceable**

That the AWQMAPs are not enforceable is easily ascertained from the Oregon statute which states that “[t]he rules adopted under this subsection shall constitute *the only enforceable aspects* of a water quality management plan.”<sup>48</sup> The EPA-approved TMDLs also make clear that the AWQMAPs are not enforceable. For example, the North Coast TMDL for temperature, bacteria, and sedimentation states “[t]hough not enforceable, the AWQMAP also included suggested management measures that would control pollutants at their source.”<sup>49</sup> Further evidence of the recommended and voluntary nature of the plans can be seen by the plans themselves in which, for example, landowners are “encouraged to develop a nutrient management strategy” and obvious

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Measures for Agricultural Sources in Response to Federal Findings of January 1998" dated December 2002 and the "Submittal of Additional Information on the State's Measures for Urban Sources in Response to Federal Findings of 1998" dated November 2002, June 24, 2003 (hereinafter "2003 Comments") at 3.

<sup>46</sup> E-mail from Allison Castellan, NOAA to Christine Reichgott, EPA November 25, 2003 Re: OR Call Follow-up.

<sup>47</sup> Email from Mary Elliott Rolle, NOAA GC, to Allison Castellan, NOAA, Re: enforceability of OR Ag. Plans, December 8, 2003.

<sup>48</sup> ORS 568.912(1)(emphasis added). While the statute allows the ODA to adopt rules that would require landowners to prevent and control water pollution from agricultural activities and soil erosion by constructing or maintaining works or facilities, use specific agricultural and cropping practices, or deploy “[a]ny other measure or avoidance necessary for the prevention or control of water pollution of the waters of the state,” ORS 568.912(2)(c), the statute also proscribes the ODA from prohibiting any specific practice “unless the department has a scientific basis for concluding that the practice is a factor in causing water quality standards to be exceeded.” ORS 568.912(3).

<sup>49</sup> Appendix D, Nestucca Bay Watershed TMDL Water Quality Management Plan, <http://www.deq.state.or.us/WQ/TMDLs/docs/northcoastbasin/wilsontrasknestucca/nestuccabay/tmdlwqmp.pdf> at 196.

requirements for keeping manure and fertilizer out of waterbodies are described with the word “should.”<sup>50</sup> The blurring of the distinction between the plans and rules, leading to confusion about which aspects of ODA’s program are enforceable continue to this day. As NOAA pointed out in 2009, the rationale for the agencies’ approval of the agriculture program was

largely on the SB1010 plans. Each coastal SB 1010 plan incorporated language consistent with the (g) guidance for the ag [management measures]. While landowners have the flexibility to choose what BMPs they want to meet the plan requirements, ODA has the authority to take enforcement action on landowners that are not complying with the plans under ORS 568.900-568.933.<sup>51</sup>

The unenforceability of the AWQMAPs would not be an issue if the ODA basin rules were sufficiently clear as to the obligations of landowners both before and after a TMDL. They are not. The rules, as EPA has pointed out, are extremely general and vague. Moreover, as the discussion below on the Umpqua basin rules demonstrates, the rules specifically make clear that violations of an AWQMAP do not constitute violations of – or even evidence of any violation of – any federal, state, or local laws or rules, specifically including ODA’s own regulations. In other words, ODA’s rules ensure a complete disconnect between its AWQMAPs and its basin rules. The rules, therefore, stand on their own, leading to several questions: (1) how does ODA interpret its ambiguous rules? (2) are landowners held accountable to ambiguous rules? and (3) to what degree does ODA interpret and apply its rules?

### **C. ODA’s Plans are Not Enforceable and ODA’s Rules Are Ambiguous**

Having relied upon the legal opinion that the AWQMAPs were enforceable, NOAA staff went on to conclude that “now we need to decide how to deal with the fact that they aren’t really using their enforcement powers.”<sup>52</sup> EPA agreed: “we should STRONGLY encourage the use of their [enforcement] authority,”<sup>53</sup> having earlier noted that “[p]utting the [management measures] in 1010 appendices can be pretty much a paper token or can be more substantial.”<sup>54</sup> NOAA relied upon the general counsel’s opinion stating, “I removed a lot of the Ag rationale because based on M.E.’s opinion (NOAA GC) the Ag [management measures] in the appendix are enforceable—thus, for the purposes of 6217 approval, have met the Ag [management measures]—it’s no different then (sic) an Ag BMP manual backed up by legal opinion that we have approved for

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<sup>50</sup> North Coast Basin Agricultural Water Quality Management Area, June 2000, Plan [http://www.oregon.gov/ODA/NRD/docs/pdf/plans/north\\_coast\\_2011\\_plan.pdf](http://www.oregon.gov/ODA/NRD/docs/pdf/plans/north_coast_2011_plan.pdf) at 35.

<sup>51</sup> E-Mail from Allison Castellan, NOAA, to David Powers, EPA, Re: SB1010 vs. OR FPA, September 25, 2009.

<sup>52</sup> E-mail from December 8, 2003 Allison Castellan to Christine Reichgott, EPA et al. Re: [Fwd: Re: enforceability of OR Ag. Plans].

<sup>53</sup> E-mail from Katie Flahive, EPA, to Allison Castellan, NOAA, December 8, 2003 Re: [Fwd: Re: enforceability of OR Ag. Plans].

<sup>54</sup> E-mail from Christine Reichgott to Allison Castellan, undated November 2003.

other states.”<sup>55</sup> Unfortunately, the logic of this statement neglected to include the fact that in Oregon there is neither a BMP manual nor plans containing BMPs that are enforceable.

EPA’s interactions on the proposed rules and plans for the Umpqua AWQMAP, adopted in January 2001, provide an example pertinent to the entire coast. In comments to ODA, EPA quoted its own earlier CZARA findings that “the State has not clearly outlined how SB 1010 will address protection of riparian areas. Furthermore, riparian areas of forest lands being converted to other uses are not protected under existing programs.’ \* \* \* So, the basic questions we are asking as we look at the plan and rules are - 1) are plan and rule measures in conformity with the 6217(g) measures and 2) do the rules and plan ensure implementation?”<sup>56</sup> EPA pointed out deficiencies with the ODA basin rules noting that “measures to be implemented are not described,” a direct reference to ODA rules’ vague descriptions of “prohibited conditions.” Specifically, EPA charged that: it was unclear how ODA would evaluate alternative approaches proposed by landowners (e.g., an alternate sheet and rill erosion standard or an adequate vegetative cover), there were no measures for nutrient or pesticide controls or dike and ditch management, and the rule language on pasture management were too general to determine what they would require.<sup>57</sup> EPA then expressed its concerns about the rules’ practical enforceability:

1. \* \* \* Enforcement is based on violation of prohibited conditions. CZARA 6217 does not require a regulatory implementation program; rather an effective implementation program backed up by appropriate enforcement when needed. The enforcement process described in the rules may be adequate, but the general language of the prohibited conditions could make it difficult for many to draw up a cogent complaint.
2. The rules do not address implementation beyond complaint-driven enforcement.<sup>58</sup>

The Umpqua basin rules themselves make clear the ineffectual nature of the AWQMAP<sup>59</sup> and the complete separation between the plans and rules:

- (2) It is intended that the Umpqua Basin Agricultural Water Quality Management Area Plan will aid in achieving compliance with these rules

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<sup>55</sup> E-mail from Allison Castellan, NOAA, to Christine Reichgott, December 11, 2003 Re: Revised Ag/Urban sections.

<sup>56</sup> Letter from Elbert Moore, EPA, to Ray Jandl, ODA, undated comments on draft AWQMAP for Umpqua Basin at 5.

<sup>57</sup> *Id.*

<sup>58</sup> *Id.* at 6-7.

<sup>59</sup> The voluntary nature of the AWQMAP relies upon education and outreach yet in 2010, the Local Advisory Committee (LAC) for the Umpqua Basin noted that “[p]roviding information to small acreage rural landowners continues to be a concern of the LAC.” See [http://www.oregon.gov/ODA/NRD/docs/pdf/plans/umpqua\\_2010\\_progrpt.pdf](http://www.oregon.gov/ODA/NRD/docs/pdf/plans/umpqua_2010_progrpt.pdf).

- through education and promotion of voluntary land management measures.
- (3) Failure to comply with any provisions of the Umpqua Basin Agricultural Water Quality Management Area Plan:
    - (a) *does not constitute a violation* of OAR 603-090-0000 to 603-090-0120, or of OAR 603-095-0010 to OAR 603-095-0760;
    - (b) *is not intended by the Department to be evidence of a violation* of any federal, state, or local law by any person.
  - (4) *Nothing in the Umpqua Basin Agricultural Water Quality Management Area Plan shall be used to interpret any requirement* of OAR 603-095-0010 to OAR 603-095-0760.<sup>60</sup>

And the rules themselves demonstrate their ambiguity because substantively, they amount to literally nothing more than the following two statements:

Substantial amounts of sediment [or phosphorus or bacteria] (i.e. in excess of water quality standards for sedimentation) moving from agricultural lands into waters of the state as a result of agricultural activities is identified as an unacceptable condition.

Agricultural management or soil-disturbing activities that preclude establishment and development of adequate riparian vegetation for streambank stability and shading, consistent with site capability, along a perennial stream which has a site potential for such vegetation is considered an unacceptable condition.<sup>61</sup>

Not only are these rules entirely unclear, thereby severely hampering a potential complainant's ability to request ODA enforcement action and likewise hampering ODA itself from taking action, there is no evidence that farmers, their advisors, or ODA is capable of determining what is sufficient to meet water quality standards which is the point ("substantial amounts ... i.e., in excess of water quality standards") at which ODA can enforce its rules on the movement of pollutants. With regard to riparian vegetation, as EPA noted in comments on the Umatilla Basin AWQMAP

We are pleased to see a riparian management measure. It does a reasonable job of describing conditions that would limit stream bank erosion, but it does not yet go far enough for temperature or habitat. Stream-side vegetation that remains in place for the long term is important for shade, channel morphology, and habitat complexity. \* \* \* How will widths of stream-side management areas (10- 100 feet) be determined? What levels of disturbance are anticipated within these areas?<sup>62</sup>

Similarly, EPA inquired during the CZARA review whether "prohibited conditions [are] easy or

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<sup>60</sup> OAR 603-095-0700(2)-(4)(emphasis added).

<sup>61</sup> OAR 603-095-0740(3)-(5)

<sup>62</sup> Chuck Clark letter to Phil Ward, Director, ODA, undated.

hard to determine on the landscape?”<sup>63</sup>

EPA’s concerns about the ambiguity of the basin rules, and specifically the question of riparian buffer design, were warranted. Explaining ODA’s own interpretation of its rules, the ODA Water Quality Program Manager, told a meeting on March 9, 2012 that ‘compliance with [ODA] rules is an important backstop, but is not sufficient to achieve load allocations and water quality standards.’ Elaborating on ODA’s highly flexible interpretation of what it means to violate water quality standards, this same manager stated in a recent email that

To support vegetation composition determinations, we [ODA] have relied on a concept we have called “site capability.” We define this term as the highest ecological status an area can attain *given political, social, or economic constraints*.<sup>64</sup>

This extraordinarily fluid interpretation of ODA rules that are ostensibly linked to meeting water quality standards clearly undercuts any other agency’s interpretation that ODA’s prohibited conditions are the equivalent of ODA’s requiring agricultural sources to meet water quality standards. Given that its more detailed AWQMAPs are neither enforceable nor can be used as evidence of a violation of ODA’s rules, and ODA’s rules are both ambiguous and interpreted by the agency as not meaning what they say, the only agency upon whose authority the federal agencies can rely to meet CZARA requirements is DEQ. The question remaining is whether the DEQ retains legal authority over agricultural nonpoint sources and whether it is either able or willing to use that authority.

#### **D. The Umpqua Basin: An Example of How Oregon Fails to Link Agricultural Practices with TMDLs as Required by CZARA**

EPA and NOAA approved Oregon’s agricultural management measures largely on the basis of the state’s AWQMAPs.<sup>65</sup> Given that the AWQMAPs are purely voluntary, the federal agencies have established three conditions that must have been met in order for Oregon agriculture to meet CZARA requirements:

1. a legal opinion from the attorney general or an attorney representing the agency with jurisdiction for enforcement that such authorities can be used to prevent nonpoint pollution and require management measure implementation, as necessary;
2. a description of the voluntary or incentive-based programs, including the

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<sup>63</sup> Christine Reichgott 2002 September 4, 2002 to Amy Carter, NOAA et al. Re: Coastal NPS Program Agricultural Tour.

<sup>64</sup> Email from Dave Wilkinson, Water Quality Program Manager, ODA, to Nina Bell, NWEA March 3, 2012 (emphasis added) concerning how ODA calculates and expresses width and density requirements of riparian requirements to meet water quality standards for temperature and other parameters.

<sup>65</sup> See, e.g., E-Mail from Allison Castellan, NOAA, to David Powers, EPA, Re: SB1010 vs. OR FPA, September 25, 2009.

- methods for tracking and evaluating those programs, the states will use to encourage implementation of the management measures; and
3. a description of the mechanism or process that links the implementing agency with the enforcement agency and a commitment to use the existing enforcement authorities where necessary.<sup>66</sup>

While Oregon has a legal opinion, it is unclear why the federal agencies found that Oregon has a method of tracking the implementation of management measures as neither ODA nor DEQ has such a program in place. Neither do ODA's vague area rules and DEQ's refusal to use its enforcement authorities support a finding that there is a process or commitment to use enforcement authorities where necessary. In fact, the federal agencies have consistently identified concerns with whether and how the DEQ's backup enforcement authority might be used and that TMDLs developed by DEQ are not used by ODA to enhance the requirements for agricultural management measures needed to bring sources into compliance with load allocations. In June 1999, EPA noted

A clear link [with the AWQMAPs] is particularly important with the TMDL which will specifically describe targets necessary to achieve water quality standards. Where a TMDL exists, the AWQMAP must describe how the prescribed actions will help achieve the allocations in the TMDL.<sup>67</sup>

In subsequent comments made by EPA on the initial Umpqua Watershed plans and rules, EPA noted that it had the same concern as it had expressed with regard to other 1010 plans. Its first concern was the integration of the plans and rules with TMDLs, commenting that "[i]t is not clear in the plans we've seen so far whether watershed analysis for the TMDL will be used to help focus agricultural efforts nor whether those efforts will be aimed at the agricultural load allocation defined in the TMDL."<sup>68</sup> EPA further noted that

The 1010 plan and rule should commit to measurable movement towards desired riparian conditions or functional riparian habitat. Desired riparian conditions include shade levels consistent with site-potential vegetation, overstory and understory vegetation, large wood and organic matter inputs, bank stability, and sediment/nutrient trapping capacity.<sup>69</sup>

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<sup>66</sup> Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance for Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA), available at [http://coastalmanagement.noaa.gov/nonpoint/docs/6217\\_adminchanges.pdf](http://coastalmanagement.noaa.gov/nonpoint/docs/6217_adminchanges.pdf) at 4 (hereinafter "Final Changes").

<sup>67</sup> EPA's Primary Concerns regarding Oregon Agricultural Water Quality Management Area Plans under SB 1010, June 1999.

<sup>68</sup> Letter from Elbert Moore, EPA, to Ray Jaendl, ODA, comments on the Draft Agricultural Water Quality Management Area Plan and proposed rules for the Umpqua River Basin, undated (circa 2000).

<sup>69</sup> *Id.* at 3.

But EPA worried that the AWQMAPs “contain no assurances that any on-the-ground measures will actually be implemented” and that “the AWQMPs do not tell the reader the extent to which landscape conditions will change.”<sup>70</sup> Specific to the Umpqua watershed, EPA pointed out that “the rules for the Umpqua do not adequately mirror the plan” and noting that “the prohibited conditions in the rules are general and vague and do not match the more specific and clear unacceptable conditions in the plan.” In further comments, EPA pointed out the ambiguity and inutility of all ODA basin rules:

[T]here are unacceptable conditions in the plan for nutrient management and pesticide management which make sense, but these sections are entirely missing from the rules. Also in many cases, the prohibited conditions in the rules are general and vague and do not match the more specific and clear unacceptable conditions in the plan.<sup>71</sup>

EPA’s concern was correctly placed. As pointed out above, the AWQMAPs cannot even be used as evidence of the intent of the rules for enforcement purposes.

Finally, the federal agencies may have relied on agency assurances that the ODA basin rules would be updated to reflect either the AWQMAPs or TMDLs as they became available because ODA rules state that “[a]fter adoption of the TMDLs, these rules will be reviewed and modified as needed to provide reasonable assurance that the load allocations for agriculture will be met.”<sup>72</sup> Again, turning to the Umpqua as an example, despite a TMDL for the Umpqua’s having been developed by DEQ and approved by EPA on April 12, 2007,<sup>73</sup> with a subsequent biennial review conducted by ODA in May 2008, the ODA basin rules were not revised. This is not a surprise; no ODA basin rules have been revised following a TMDL. And lack of action by ODA would not mean that DEQ would step into the breach, as DEQ made clear in its Umpqua TMDL, stating that “it is envisioned that sufficient initiative exists to achieve water quality goals with minimal enforcement. Should the need for additional effort emerge, it is expected that the responsible agency [ODA] will work with land managers and permit holders to overcome impediments to progress through education, technical support or enforcement.”<sup>74</sup> This leads to the question: has progress been made in improving water quality in the Umpqua? As measured by closures in the Umpqua Triangle shellfish management area, the answer is “no.” Bacteria levels have at best stayed the same and may have worsened<sup>75</sup> despite DEQ’s having finalized a

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<sup>70</sup> *Id.*

<sup>71</sup> *Id.* at 4.

<sup>72</sup> OAR 603-095-0700(1).

<sup>73</sup> *See* DEQ website, <http://www.deq.state.or.us/WQ/TMDLs/umpqua.htm>.

<sup>74</sup> Umpqua Basin TMDL, available at <http://www.deq.state.or.us/WQ/TMDLs/docs/umpquabasin/umpqua/chpt1overview.pdf> at 1-9.

<sup>75</sup> Shellfish closures in the Umpqua Triangle shellfish management area from 2004 to 2011, measured in days closed: 29, 28, 40, 35, 20, 13, 38, 42. Information provided by Alex Manderson, Food Safety Division, Oregon Department of Agriculture on March 19, 2012.

TMDL in October 2006.

### **III. DEQ Retains Enforcement Authority Over Agricultural Nonpoint Sources But Has Not Been Willing to Use It**

DEQ requested advice from the Oregon Department of Justice on its ability to implement the Nonpoint Pollution Control Program. In 2005 an assistant attorney general for Oregon stated that the DEQ and EQC have broad authority to

by rule, or order, impose and enforce limitations or other controls as necessary to achieve and maintain water quality standards.” ORS 468B/110(1). This authority includes the implementation of TMDLs, wasteload allocations for point sources, and load allocations for nonpoint sources. ORS 468B.110(1). The EQC is also authorized to take any action needed to implement the Federal Water Pollution Control Act within Oregon. ORS 468B.035.<sup>76</sup>

In a footnote, the author notes that this “authority is sufficiently broad to allow DEQ to enforce such limitations or controls without demonstrating violation of a water quality standard. This is true of DEQ’s general authority under ORS 468B.025(1)(a).”

However, to the extent that DEQ has statutory legal authority over agricultural nonpoint sources it has, for all practical purposes, given it away. Its rules incorrectly conflate meeting the ambiguous and nearly unenforceable ODA rules with meeting water quality standards:

For farming or ranching operations on State or private lands, water quality standards are intended to be attained and are implemented through the Agricultural Water Quality Management Act (ORS 568.900 to 568.933) and rules thereunder, administered by the Oregon Department of Agriculture. Therefore, farming and ranching operations that are in compliance with the Agricultural Water Quality Management Act requirements will not be subject to DEQ enforcement under this rule.<sup>77</sup>

The rules reflect DEQ’s own operating practice, namely to defer entirely to ODA and to take no enforcement action against agricultural pollution sources. Therefore, DEQ’s assertion of legal authority to enforce its own water quality standards has no practical value unless and until DEQ demonstrates a method and a willingness to assert its authority and take enforcement actions.

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<sup>76</sup> Memorandum to Don Yon, DEQ, from Lynne Perry, Oregon DOJ, Re: Oregon’s Nonpoint Pollution Control Program under CZARA, January 11, 2005 at 2 (footnotes omitted).

<sup>77</sup> OAR 340-041-0028(12)(f)(related to temperature); *see also*, OAR 340-041-0061(11)(“If a person subject to an ODA area plan and implementing rules causes or contributes to water quality standards violations, the department will refer the activity to ODA for further evaluation and potential requirements.”) and OAR 340-041-0061(12)(“Where the department designates a federal agency as a designated management agency, implementation of these plans, practices, and strategies is deemed compliance with this [water quality standards] division.”).

In fact, DEQ recently revised its TMDL rules – after having signed its letters to the federal agencies committing to use of its regulatory authority – to clarify its lack of intent to use that authority to implement TMDLs even where ODA fails to do so. The rule language adopted called for continued deference to ODA:

In areas where a TMDL has been approved, agricultural water quality management area plans and rules must be sufficient to meet the TMDL load allocations. If the department determines that the plan and rules are not adequate to implement the load allocation, the department will provide ODA with comments on what would be sufficient to meet TMDL load allocations. If a resolution cannot be achieved, the department will request the Environmental Quality Commission to petition ODA for a review of part or all of water quality management area plan and rules implementing the TMDL.<sup>78</sup>

In sum, DEQ continues to attempt to paper over the issue by providing the federal agencies with legal opinions that it has legal authority while making it abundantly clear it has no intention of exercising that authority.

#### **IV. Oregon's Failure to Regulate Nutrients**

Early in the review process, the federal agencies focused on nutrients as an example of their concern about the linkage between DEQ's water quality programs and the ODA program.<sup>79</sup> Ten years ago, they pointed out that "[t]he majority of AWQMAPs do not require equipment calibration or written nutrient management plans," mistakenly believing that area plans can "require" anything, and asked for "confirmation that DEQ and ODA are committed to revisions [of AWQMAPs] over time so that comprehensive treatment of the nutrient management measures is included."<sup>80</sup> The agencies expressed concern that "the AWQMAP may not include the related management measure, even when that measure affects other listed parameters (e.g., nutrients not listed due to lack of data, but affect listed parameters such as algal growth, chlorophyll a, dissolved oxygen and pH)."<sup>81</sup> They were correct to be concerned about the DEQ and ODA linkage for nutrients in particular because nutrients are a serious weakness in Oregon's water quality program. The weakness starts with Oregon's lack of nutrient criteria other than a nuisance phytoplankton growth measured as chlorophyll a values.<sup>82</sup> Oregon apparently has no

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<sup>78</sup> OAR 340-042-0080(3).

<sup>79</sup> See e.g., Email from Amanda Punton, Oregon, to Kuipers Keelin, NOAA "Re: follow up," September 23, 1999 ("Since streams were not [303(d)] listed for nutrients, there was opposition to including nutrient management measures in the [North Coast AWQP] plan.")

<sup>80</sup> 2002 Comments at 2-3.

<sup>81</sup> *Id.* at 2.

<sup>82</sup> OAR 340-041-0019(1)(b) ("The following average Chlorophyll a values must be used to identify water bodies where phytoplankton may impair the recognized beneficial uses.")

intention of adopting numeric nutrient criteria, or even improving its narrative approach.<sup>83</sup>

As a result of the weaknesses in its standards, Oregon has very few listings for nutrients on its 303(d) list of impaired waters. A review of the Oregon 2010 integrated report database demonstrates either that Oregon is unique among states in not having a nutrient problem or it simply lacks the regulatory structure and data required under the Clean Water Act to identify and solve nutrient pollution.<sup>84</sup> As the following table illustrates, DEQ has concluded that the vast majority of samples it has evaluated are inadequate to determine whether there is a nutrient problem in Oregon's waters – precisely mirroring the federal agencies concerns about lack of nutrient data – and resulting in almost no findings that Oregon waters are impaired by nutrients, which is an extremely unlikely proposition.<sup>85</sup> The lack of findings on nutrient impairment has a direct effect on the ability of ODA to enforce its own rules because those rules are tied to DEQ's water quality standards.<sup>86</sup>

	Potential concern/ insufficient data	TMDL completed	attaining	303(d) list
nutrients	224	0	0	0
nitrates	9	3	0	1
chlorophyll a	approx. 250	19	approx. 125	16
phosphorus	2	55	5	0
phosphate phosphorus	approx. 750	0	0	0

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<sup>83</sup> EPA website, Nutrient Criteria, Oregon Criteria Development Progress, available at [http://water.epa.gov/scitech/swguidance/standards/criteria/nutrients/states\\_or.cfm](http://water.epa.gov/scitech/swguidance/standards/criteria/nutrients/states_or.cfm). EPA headquarters reports on its website that Oregon has no plan for criteria development, collection and analysis of information and data, or proposal and adoption of criteria.

<sup>84</sup> A strikingly different approach to nutrients is contained in the water quality standards applicable to the Clear Lake Watershed of the MidCoast Basin. OAR 340-041-0225(3) restricts nutrients for the purpose of preserving the quality of public water supplies. Based on a TMDL developed for this watershed there is no obvious linkage to nonpoint source controls however.

<sup>85</sup> On March 15, 2012, EPA proposed to add eight new chlorophyll a listings to Oregon's 303(d) list. See [http://www.epa.gov/region10/pdf/water/303d/oregon/Final\\_Enclosure\\_2\\_EPA\\_List\\_Methodology.pdf](http://www.epa.gov/region10/pdf/water/303d/oregon/Final_Enclosure_2_EPA_List_Methodology.pdf).

<sup>86</sup> See, e.g., OAR 603-095-0840(6)(b).

## **V. Oregon Fails to Adequately Regulate Confined Animal Facilities**

The predominant agricultural activity in Oregon's coastal zone is dairy farming.<sup>87</sup> After years of gathering information, the federal agencies found that Oregon's program for confined animal facilities included measures conforming to the Guidance and enforceable policies and mechanisms to ensure implementation. In December 2002, Oregon provided additional information to the federal agencies to demonstrate compliance with the management measures.<sup>88</sup> Specifically, Oregon cited the passage of House Bill 2156 for its expansion of the definition of CAFOs and the conversion of permitting from state Water Pollution Control Facilities (WPCF) permits to federal NPDES permits, stated that since June 1999 ODA had committed to a minimum of at least annual inspections of permitted CAFOs, and noted that it had included language in its AWQMAPs to address CAFO requirements. Oregon also pointed to WPCF permit language, in special condition number 7, that "[w]hen manure is spread on land, care shall be taken to assure that the land application rate does not exceed the agronomic utilization rate for the nutrients in the manure[.]" The submission also pointed to the hiring of new CAFO inspectors, the use of back-up enforcement authority, the seeking of authorization from EPA to allow ODA to issue the NPDES permits in lieu of DEQ, and assurance of full state regulatory authority for ODA to enforce CAFO permits to support such federal authorization. The state noted that the existing CAFO permits were essentially non-discharge permits, allowing discharges only during chronic or catastrophic rainfall events. Finally, the submittal concluded by noting that "[p]ermit coverage under the NPDES CAFO general permit may also be terminated if Total Maximum Daily Loads (TMDLs) are established and a CAFO's discharge during chronic rainfall or catastrophic events is determined to be a contributor to a stream that is water quality limited." Perhaps on paper, Oregon has made a sufficient case that CAFOs are adequately regulated but on-the-ground there was and continues to be another reality.

The Tillamook subbasin in Oregon's North Coast Basin, is an excellent example of the combined failures of the joint permitting programs of DEQ and ODA to restrict manure generated by CAFOs from entering surface waters. The dairy farms in the Tillamook are largely based on former wetlands under which tile drainage has been installed, creating a direct conduit to waters of the U.S. for land-applied manure. About eight percent of the Tillamook watershed is used for agriculture and while the human population has remained stable over the last few decades, the dairy cow population doubled between 1990 and 2005 to a total of approximately 30,000 animals. The ruminant population generates 325,000 tons of manure annually, which is seven times more than that of the human population in solid tons.<sup>89</sup> There are approximately 185 permitted CAFOs in the Tillamook that have caused continuing problems with attainment of beneficial uses such as shellfish harvesting. At best, over the years the shellfish closures have

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<sup>87</sup> Program Inventory for Chapter 2: Management Measures for Agricultural Sources, undated.

<sup>88</sup> 2002 Submittal.

<sup>89</sup> Basin-Wide Analysis of the Dynamics of Fecal Contamination and Fecal Source Identification in Tillamook Bay, Oregon, Orin C. Shanks et al., Applied and Environmental Microbiology, 72: 5537-5546, August 2006 available at [http://www.tbnep.org/images/stories/documents/resource\\_center\\_docs/water\\_quality/Source%20Identification%20-%20Field.pdf](http://www.tbnep.org/images/stories/documents/resource_center_docs/water_quality/Source%20Identification%20-%20Field.pdf).

not improved and perhaps they have worsened.<sup>90</sup> Years with 100 days of closures are not atypical.

In 2000, Oregon set ambitious goals for Tillamook water quality improvements including to “achieve water quality standards for bacteria, temperature, and suspended sediment by 2010,” an assertion cited by the federal agencies in their review of Oregon’s draft plan.<sup>91</sup> That same year, ODA adopted the AWQMAP for the North Coast Basin, including the Tillamook, resulting in critical comments by EPA about whether management measures would apply to all waters or just impaired waters and expressing concern about the generality of the basin rules.<sup>92</sup> Specifically, EPA observed

The livestock and grazing measure Required and Prohibited Conditions are rather weak, which seems to be quite inadequate given the number of head of cattle in Tillamook Co. The Tillamook Bay NEP identifies water quality and habitat issues related to livestock and other agricultural activities as priority problems.

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The nutrient management measures is also very weak in that it does not include any CAFO requirements.<sup>93</sup>

Despite EPA’s concerns, the federal agencies determined later that year that Oregon had met the conditions for CAFOs. And despite the finding, the agencies continued to express doubts: “EPA and NOAA would like information on how ODA will implement the CAFO program, including both permitted and non-permitted facilities, particularly in the coastal nonpoint management area.”<sup>94</sup> Likewise, given that ODA had claimed “the SB 1010 planning process will be available for back-up enforcement as needed,”<sup>95</sup> the federal agencies sought “confirmation that DEQ and ODA are committed to revisions over time [to the AWQMAPs] so that comprehensive treatment of the nutrient management measure is included” and expressed concern that the AWQMAPs “do not ensure the widespread and comprehensive implementation of all the management

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<sup>90</sup> Shellfish closures in the Tillamook Main shellfish management area from 2004 to 2011, measured in days closed: 64, 63, 91, 78, 107, 76, 117, 99. Shellfish closures in the Tillamook West management area: 17, 31, 53, 45, 55, 16, 54, 49. Information provided by Alex Manderson, Food Safety Division, Oregon Department of Agriculture by email on March 19, 2012.

<sup>91</sup> 2000 Upgrade at 2.

<sup>92</sup> Letter from Elbert Moore, Director EPA Region X Office of Ecosystems and Communities to Ray Jaindl, ODA, February 15, 2000, at 7.

<sup>93</sup> *Id.*

<sup>94</sup> Memorandum from Bill Millhouser, Pacific Regional Manager, OCRM Coastal Programs Division, NOAA et al. To Amanda Punton, Oregon Coastal Management Program, Comments on April 2002 Submittal – Agricultural Management Measures, September 10, 2002 at 2.

<sup>95</sup> Marc Peters letter at 1.

measures.”<sup>96</sup> Oddly, the federal agencies appear to have granted interim approval to Oregon’s programs regarding livestock while maintaining all or nearly all of their initial skepticism.

Despite the significant infusion of federal money through the Clean Water Act’s section 320 National Estuary Program (NEP) to the Tillamook Estuaries Partnership (TEP), beginning in 1994 – over 17 years ago – bacterial pollution of the Tillamook Bay has not improved over the years.<sup>97</sup> Curiously, the TEP does not monitor bacterial levels in the bay, but only in the watershed. There, the TEP finds that the Tillamook River watershed has “some of the highest *E. coli* levels in the region” and that levels are increasing at a number of enumerated sites. The TEP quotes Dr. Orin C. Shanks, a researcher on Tillamook bacteria, that “a watershed manager’s best strategy for decreasing indicators of fecal pollution in this watershed is to mitigate runoff from ruminant sources,” while not urging any regulatory actions to compensate for the failures of what is essentially a voluntary approach (despite the NPDES permits). Yet, despite the studies, the special federal funding, the educational programs and outreach, the AWQMAP and ODA basin rules, and the assurances of no fewer than two state agencies in charge of regulating the discharges of permitted CAFOs, no progress in reducing bacteria pollution has been made.<sup>98</sup>

In addition, bacteria contamination of the watershed has been the subject of a TMDL issued by DEQ. In 1998, DEQ determined that the lower reaches of the Miami, Kilchis, Wilson, Trask, and Tillamook rivers were water quality limited for bacteria, with two segments of the bay and 65 miles of waterway listed as violating the bacteria standards.<sup>99</sup> In 2001, the completed TMDL for bacteria in the watershed found “[c]oncentrations are particularly high during storms and tend to be highest in the lower elevations of each of the basins; the areas associated with the greatest concentrations of agriculture, urban development, and roads.”<sup>100</sup> DEQ also concluded that “[c]oncentrations in the Bay are also commonly elevated above the [water quality standards] in

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<sup>96</sup> *Id.* at 2-3.

<sup>97</sup> TEP 2010 Tillamook Bay Watershed Health Report, available at [http://www.tbnep.org/images/stories/documents/sob\\_final\\_2010.pdf](http://www.tbnep.org/images/stories/documents/sob_final_2010.pdf) “[o]yster harvests are regularly closed due to unsafe fecal coliform levels in the Bay.”).

<sup>98</sup> The ODA Food Safety Division did extend in 2010 the “Conditionally Approved” area of the Tillamook Bay further south into previously “Prohibited” waters. This apparent improvement does not reflect actual improvements in either water quality or shellfish harvesting because the state’s prohibition is on harvesting, not on growing. In addition, although the ODA alleges the frequency of closures has been reduced, the duration of closures appears to have increased. ODA also claims that farmers in the Tillamook are no longer spraying manure on their fields. This is largely true because farmers are now disposing of manure through pipes and midnight dumping, where manure can be seen on outgoing and low tides late at night during the winter months.

<sup>99</sup> Tillamook Bay Watershed TMDL, available at <http://www.deq.state.or.us/wq/tmdls/docs/northcoastbasin/wilsontrasknestucca/tillamook/tmdl.pdf> at 57.

<sup>100</sup> *Id.* at 3.

the Bay, especially when river flows increase in response to rainfall and runoff.”<sup>101</sup> The TMDL noted that “the association of high bacterial concentrations during high-flow storm events” was responsible for closure of shellfish beds on a rainfall basis specified in the Tillamook Management Plan for Commercial Shellfish Harvesting and that “[d]ata support the closure of these areas during high flow events, as concentrations during closures typically exceed the standard and are higher than during open periods.”<sup>102</sup> DEQ concluded that to attain water quality standards, “allocated instream concentrations reflect reductions ranging from 90% to 99% relative to current conditions.”<sup>103</sup> In other words, *a massive load reduction is required* to meet Oregon’s water quality standards and to ensure protection of the designated uses. This massive load reduction can only come about by stopping the spreading of manure on lands that wash off during the rainfall events and preventing illegal midnight dumping. Despite the passage of over a decade since DEQ developed the TMDL, however, no improvements have been made.

In 2006, Dr. Shanks published a report on the widespread fecal contamination of the Tillamook Bay. While there are human sources of *E. coli* in the bay, animal sources remain the significant sources of fecal contamination:

More than one-quarter of all sampling sites were in violation of the Oregon water quality standard for *E. coli* counts. All of these sites are situated near known human point sources or agricultural operations. For example, the values for four sampling sites along the Tillamook River, affected by rural residential areas and more than 30 CAFO facilities, exceeded the Oregon *E. coli* standards more than 75% of the time, suggesting that this portion of the river is severely polluted throughout the year. *E. coli* counts were also very high at two sites that were affected by urban and agriculture activities, including sampling sites that were the farthest downstream along the Kilchis River (Kilchis-5; 446 MPN/100 ml) and the Trask River (Trask-4; 345 MPN/100 ml) near a slough adjacent to the city of Tillamook. The values for two bay sites (Bay-1 and -2) routinely exceeded the recreational use standard; these sites are near the confluence of the Tillamook and Trask rivers, two of the most polluted rivers according to the *E. coli* counts.<sup>104</sup>

According to the Shanks’ paper, the point and nonpoint animal sources of fecal material produced “a basin-wide probability of detection of [ruminant fecal matter] that was near 75%. This percentage rose to more than 90% during periods of moderate precipitation in the spring and fall[.]”<sup>105</sup> Put another way, “[t]he probability of detecting a human marker (approximately 35%) was less than one-half the probability of detecting a ruminant marker for the rivers.” Again, this should come as no surprise in a basin where manure is routinely spread on fields in amounts well in excess of agronomic rates and on tiled fields that have direct outlets to waterbodies. Neither

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<sup>101</sup> *Id.*

<sup>102</sup> *Id.*

<sup>103</sup> *Id.* at 5.

<sup>104</sup> Shanks at 5543-44 (internal citations removed).

<sup>105</sup> *Id.* at 5544.

the passage of time nor the adoption of a TMDL by DEQ has improved bacteria levels in the Tillamook.

The Tillamook is just one, albeit significant, example of the failures of the Oregon CAFO program. Recently the Animal Law Clinic at Lewis and Clark Law School issued a report on the program that evaluated, *inter alia*, the lack of capacity and resources associated with the Oregon program. The report found Oregon lacked adequate enforcement authority<sup>106</sup> and public participation in permitting,<sup>107</sup> and it failed to investigate complaints<sup>108</sup> and carry out adequate inspection and monitoring.<sup>109</sup> Moreover, ODA apparently has an extremely limited view as to what enforcement actions it can take to address CAFOs with ongoing violations and whether it is compelled to reissue NPDES permits to CAFOs which have a history of noncompliance.<sup>110</sup> The report found further that “ODA is incapable of meeting the many requirements of a comprehensive NPDES program” including inspection and compliance.<sup>111</sup> ODA also suffers from a culture that avoids enforcement, as with its basin rules, “rarely [having] brought administrative actions and, when it has, almost never assessed fines,” regardless of repeat offenses.<sup>112</sup> In addition, Oregon’s general permit fails to require all but large CAFOs to sample the nitrogen and phosphorus levels of their manure, litter, and process wastewater, both land-applied and exported. Smaller CAFOs are only required to sample soil from their land application areas.<sup>113</sup> Further, mortality management, contact between animals and U.S. waters, and projected future conservation practices are only accounted for to the extent that each AQWMAP “must, to the extent applicable” include protocols for maintaining these records.<sup>114</sup>

Based on the complete failure of the ODA to resolve the water quality problems largely created by the dairy farms in the Tillamook, the DEQ must step in and be prepared to use enforcement authority to implement its TMDL. Nothing short of a demonstration that this authority can and will be used is sufficient to meet the requirements of CZARA given the long-standing failures of the current program.

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<sup>106</sup> Report on the Enforcement of the Clean Water Act As it relates to CAFOs By Oregon’s Department of Agriculture, Animal Law Clinic, Lewis & Clark Law School, November 8, 2011, available at <http://law.lclark.edu/live/files/10807-2012-oda-clinic-report>, at 22 - 27.

<sup>107</sup> *Id.* at 27-33.

<sup>108</sup> *Id.* at 33-35.

<sup>109</sup> *Id.* at 35-38.

<sup>110</sup> *Id.* at 42-48.

<sup>111</sup> *Id.* at 48; 48-50.

<sup>112</sup> *Id.* at 51; 50-69.

<sup>113</sup> Oregon CAFO NPDES General Permit 01-2009.

<sup>114</sup> *Id.* at 12.

## **VI. The Federal Agencies Relied on Pesticide Management Measures that No Longer Protect Designated Uses**

Over the years, Oregon consistently failed to demonstrate compliance with the Guidance measures for pesticides. In its 2002 submittal, Oregon described its various pesticide programs and stated that for basins with “pesticides listed [as] a TMDL pollutant (which only includes Bear Creek), the AgWQMPs adopted reference the pesticide management measure, include it as a requirement for an approvable farm level water quality management plan, or include it as a recommended approach for landowners to deal with water quality parameters.”<sup>115</sup> Needless to say, this approach failed to ensure widespread use of the pesticide management measures. By 2003, the federal agencies were once again pointing out that the state’s pesticide programs fell short of CZARA requirements for, among other reasons, “[f]ew of the 1010 plans developed so far address pesticide management” and that Oregon had stated “no new rules for pesticides will be developed under the Agricultural Water Quality Management Program.”<sup>116</sup> The next year, however, the federal agencies had adopted a new approach and decided to rely upon a citizens’ group challenge in *Washington Toxics Coalition v. EPA*.<sup>117</sup> Language was discussed for the Oregon interim approval of agricultural management measures to obliquely refer to this case as “processes that may result in additional buffer protection requirements beyond those on existing labels in order to protect endangered species.”<sup>118</sup> In fact, despite the efforts of the federal government, the court subsequently imposed an injunction<sup>119</sup> requiring no-spray riparian buffers for 37 pesticides.<sup>120</sup>

This injunction remained in place through 2010 but as each Biological Opinion (BiOp) has been issued by the National Marine Fisheries Service (NMFS) pursuant to court order, it ceases to have effect. NMFS has issued 24 BiOps, rendering the injunction moot for 24 pesticides. Nearly all of the BiOps issued thus far have found jeopardy and adverse modification of habitat for some

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<sup>115</sup> 2002 Submittal at 16.

<sup>116</sup> 2003 Comments at 4-5. This remains the case today. With the exception of the Coos and Coquille rules (pesticide provisions limited to cranberry production) and the North Coast rules (pesticides to be used in accordance with labels), the ODA area rules do not mention pesticides. *See, e.g.*, OAR 603-095-1540(4). Rules available at [http://www.oregon.gov/ODA/NRD/water\\_agplans.shtml](http://www.oregon.gov/ODA/NRD/water_agplans.shtml).

<sup>117</sup> *Washington Toxics Coalition v. EPA*, No. C01-132, 2002 WL 34213031 (W.D. Wash. July 2, 2002) *aff’d*, 413 F.3d 1024 (9th Cir. 2005).

<sup>118</sup> Email from Teena Reichgott, EPA Region X, to Allison Castellan, NOAA, et al., Re: “Findings on OR add measures for forestry,” April 9, 2004.

<sup>119</sup> *Washington Toxics Coalition v. EPA*, No. C01-132, Order (Jan. 1, 2004) *aff’d*, 413 F.3d 1024 (9th Cir. 2005).

<sup>120</sup> A list of the 37 pesticides is available on the NMFS website at [http://www.nmfs.noaa.gov/pr/consultation/pesticide\\_schedule.htm](http://www.nmfs.noaa.gov/pr/consultation/pesticide_schedule.htm).

threatened and endangered species including those in the CNPCP boundary.<sup>121</sup> These findings have associated reasonable and prudent alternatives (RPA)<sup>122</sup> with buffers larger than those included in the injunction.<sup>123</sup> To date, however, EPA has failed to implement any of the RPAs. Therefore, with no court-ordered buffers remaining and no EPA-required buffers for 24 pesticides and no plan articulated by Oregon to adopt the buffers set out in the BiOps, the current use of these 24 pesticides in Oregon are by definition not protective of the designated uses, as required by CZARA.<sup>124</sup> Moreover, for the remaining 13 pesticides for which BiOps will be completed prior to June 30, 2013, with the same effect of removing the court-ordered buffers and likely the same EPA inaction, Oregon also has no plan with which it intends to protect designated uses. While the BiOp and injunction buffers are not necessarily the equivalent of meeting water quality standards and fully protecting designated uses as, for example, NMFS concluded there would be “take” even with the buffers in its first BiOp, use of the RPA buffers would constitute significant movement towards meeting standards. In order to meet CZARA statutory requirements that would allow the federal agencies to approve Oregon’s pesticide measures, either EPA must institute the required buffers as set out in the RPAs or Oregon must do so.

## Conclusion

On December 4, 1996, the ODA wrote NOAA “the Department of Agriculture feels strongly that before a determination can be made as to whether its programs [for CAFOs, Erosion and Sediment Control, Nutrients, Pesticide, Grazing, and Irrigation Water Management] are capable of ensuring widespread implementation of the 6217 management measures, adequate time will be needed for a meaningful evaluation of the programs and processes which are currently in

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<sup>121</sup> Summary of jeopardy and adverse modification impacts is available on the NMFS website at [http://www.nmfs.noaa.gov/pr/consultation/pesticide\\_schedule.htm](http://www.nmfs.noaa.gov/pr/consultation/pesticide_schedule.htm).

<sup>122</sup> Reasonable and prudent alternatives and reasonable and prudent measures are available on the NMFS website at <http://www.nmfs.noaa.gov/pr/consultation/pesticides.htm>.

<sup>123</sup> See e.g., National Marine Fisheries Service Endangered Species Act Section 7 Consultation Biological Opinion for Environmental Protection Agency Registration of Pesticides Containing Chlorpyrifos, Diazinon, and Malathion, November 2008, available at [http://www.nmfs.noaa.gov/pr/pdfs/pesticide\\_biop.pdf](http://www.nmfs.noaa.gov/pr/pdfs/pesticide_biop.pdf) (buffers for these three organophosphates as follows: (1) Prohibit aerial applications of the three pesticides within 1,000 feet of salmon waters, BiOp at 393; (2) Prohibit ground applications of the three pesticides within 500 feet of salmon waters, *id.*; and (3) Require a 20 foot non-crop vegetative buffer around salmon waters and ditches that drain into salmon habitat, *id.* at 396. See also BiOp for Chlorpyrifos, Diazinon, and Malathion, April 2009, available at <http://www.nmfs.noaa.gov/pr/pdfs/carbamate.pdf> (buffers for these three insecticides: (1) Prohibit aerial applications of the three pesticides within 600 to 1,000 feet of salmon waters, BiOp at 491; (2) Prohibit ground applications of the three pesticides within 50 to 600 feet of salmon waters, *id.*

<sup>124</sup> 16 U.S.C. § 1455b(b)(3)(Each State shall provide for the “implementation and continuing revision from time to time of additional management measures ... that are necessary to achieve and maintain applicable water quality standards ... and protect designated uses.”).

place.”<sup>125</sup> Fifteen years have passed since ODA suggested that the passage of time would allow for the federal agencies to make a judgment as to whether the agency’s programs and approach had resulted in “widespread implementation” of required management measures, including those actions needed to attain water quality standards. The federal agencies themselves set a 15-year marker – October 2013 – by which time states with conditional approvals were to ensure that “all applicable [Guidance] management measures to protect and restore coastal waters will be implemented,” recognizing that water quality improvements might lag behind.<sup>126</sup> If anything has been made clear in that time it is that the ODA is not capable of ensuring that agricultural landowners do anything. Whether DEQ is willing and able to use its backup legal authority to do that which ODA will not do is in question as there is no evidence of DEQ’s ever having expressed its intent to do so other than references in the *NWEA* settlement commitments to which it may not be fully committed.<sup>127</sup>

We have written this letter on the premise that DEQ should be given one last chance to demonstrate its ability and willingness to ensure the widespread use of the Guidance measures and such additional management measures as are required to ensure agricultural lands meet water quality standards. The federal agencies set out what should be done if “levels of implementation are less than needed to ensure implementation within 15 years of the date of conditional approval,” namely “the development of new enforceable policies and mechanisms to achieve full implementation of the [Guidance] management measures.”<sup>128</sup> That time is now upon the agencies. ODA is not able to demonstrate that its voluntary AWQMAP program has implemented the Guidance measures across the coastal watersheds nor that it has incorporated any additional requirements to meet water quality standards associated with TMDLs completed by DEQ. If DEQ cannot or will not now develop new enforceable policies and mechanisms to immediately address the serious defects in Oregon’s agricultural nonpoint program, the federal agencies will have no choice but to disapprove Oregon’s coastal nonpoint program.

As Oregon moves swiftly towards its final effort to demonstrate that it can meet the three remaining conditions on Oregon’s CNPCP – onsite disposal system conditions, new development, and additional management measures for forestry – we believe the federal agencies need to reexamine their tentative approval of Oregon’s agricultural management measures. For the reasons set out in this letter, we strongly believe that that interim approval will not withstand scrutiny, even by the agencies themselves. For this reason, we urge the federal agencies to at a minimum, with the utmost speed and persuasion, convince the Oregon DEQ to view the MidCoast “Implementation Ready” TMDL under development as one key to demonstrating DEQ’s authority and willingness to regulate agricultural nonpoint sources. While the MidCoast Basin contains very little agricultural land, waters affected by agriculture are listed as violating

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<sup>125</sup> Marc Peters letter at 3.

<sup>126</sup> Final Changes at 3.

<sup>127</sup> See, e.g., Letter from Nina Bell, NWEA, to Mike Bussell, EPA, and John King, NOAA, Re: Concerns About Oregon Department of Environmental Quality’s Honoring CZARA Settlement Commitments Oregon Coastal Nonpoint Pollution Control Program, April 3, 2012.

<sup>128</sup> Final Changes at 5-6.

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water quality standards for temperature and bacteria in the basin and the IR-TMDL effort underway will address both of those pollutants. In doing so, DEQ will need to demonstrate that while there may not be any “significant sources” in the same sense as there are in forestry, there are collectively and individually significant agricultural sources that it can regulate both directly and indirectly by, for example, *requiring* the same forested riparian buffers for agricultural lands as for forestry lands. We further urge the federal agencies to obtain additional assurance that DEQ is able and willing to regulate agricultural nonpoint sources that fail to take any voluntary actions. Moreover, DEQ will need to demonstrate that it can control the manure flowing from CAFOs and limit the application of pesticides.

In light of Oregon’s failures of the last 15 years, and the threatened and endangered status of some of its beneficial uses, it is our view that the bar for Oregon to demonstrate sufficient control over its agricultural nonpoint sources is very high. In addition, the description that DEQ has given the public to date of its commitment to address the outstanding forestry measures through the MidCoast IR-TMDL – which now appears to rely entirely on the same failed policies of the past and an allegedly more robust adaptive management approach – are simply not sufficient to overcome the requirements of CZARA. Nowhere is that made more clear than DEQ’s committing to identifying and assuring the implementation of so-called safe harbor best management practices while counting on adaptive management, two fundamentally antithetical approaches.

We do not imply that this will be easy. But with over a decade of making assertions regarding its nonpoint programs, rules, plans, authorities, and good intentions, it is now time that Oregon did what it has said it would do, namely to assure the use of the Guidance measures across the coastal landscape and to adopt such additional management measures as are necessary to meet water quality standards and protect designated uses.

Sincerely,



Nina Bell  
Executive Director

cc: Dick Pedersen, Director DEQ  
Bill Blosser, Chair, EQC  
Greg Aldrich, Water Quality Division Administrator DEQ  
Gene Foster, TMDL Program, DEQ  
Allison Castellan, NOAA  
David Powers, EPA  
Kim Kratz, NMFS  
Mary Lou Soscia, EPA  
Jeff Lockwood, NMFS  
Dave Croxton, EPA  
Alan Henning, EPA  
Paul Henson, USF&WS

Attachments: (sent to addressees only):

Stout, H.A., et al., Scientific conclusions of the status review for Oregon Coast coho salmon (*Oncorhynchus kisutch*), Draft report from the Biological Review Team, Northwest Fisheries Science Center, May 20, 2010.

M.F. Solazzi, et al., Effects of increasing winter rearing habitat on abundance of salmonids in two coastal Oregon streams, *Can. J. Fish. Aquat. Sci.* 57: 906–914 (2000).

Anlauf, K. J., K. K. Jones, and C.H. Stein. 2009. The Status and Trend of Physical Habitat and Rearing Potential in Coho Bearing Streams in the Oregon Coastal Coho Evolutionary Significant Unit. OPSW-ODFW-2009-5, ODFW.

ODA Plans and Rules Chart of Adoptions and Revisions, untitled.

Memorandum of Agreement Between the Oregon Department of Agriculture and the Oregon Department of Environmental Quality concerning Water Quality Limited Waterbodies (303(d)), Total Maximum Daily Loads (TMDLs) and Agricultural Water Quality Management Area Plans (AWQMAPs), June 6, 1998.

Appendix D, Nestucca Bay Watershed TMDL Water Quality Management Plan.

North Coast Basin Agricultural Water Quality Management Area, June 2011 Plan.

Umpqua Basin, ODA Progress Report.

Email from Dave Wilkinson, Water Quality Program Manager, ODA, to Nina Bell, NWEA March 3, 2012.

Umpqua Basin TMDL.

Alex Manderson, Food Safety Division, Oregon Department of Agriculture Email and Attachments, March 19, 2012.

Basin-Wide Analysis of the Dynamics of Fecal Contamination and Fecal Source Identification in Tillamook Bay, Oregon, Orin C. Shanks et al., *Applied and Environmental Microbiology*, 72: 5537–5546, August 2006.

TEP 2010 Tillamook Bay Watershed Health Report.

Tillamook Bay Watershed TMDL.

Report on the Enforcement of the Clean Water Act As it Relates to CAFOs by Oregon's Department of Agriculture, Animal Law Clinic, November 8, 2011.

Oregon CAFO NPDES General Permit 01-2009.

National Marine Fisheries Service Endangered Species Act Section 7 Consultation Biological Opinion for Environmental Protection Agency Registration of Pesticides Containing Chlorpyrifos, Diazinon, and Malathion, November 2008.