Support Document, Review of Idaho's Antidegradation Implementation Methods (Idaho docket 58-0102-1001)

August 17, 2011

The Clean Water Act regulations at 40 CFR § 131.12 require states and tribes to adopt an antidegradation policy and identify implementation methods for that policy. The state or tribe's policy must provide protection for all existing uses, hereafter referred to as "Tier 1" (40 CFR §131.12(a)(1)). The policy must also require the maintenance and protection of high quality waters ("Tier 2") unless the state finds that allowing lower water quality is "necessary" to accommodate "important economic or social development in the area in which the waters are located," a process hereby referred to as "Tier 2 review" (40 CFR § 131.12(a)(2)). Additionally, the policy must provide for the maintenance and protection of water quality in ONRWs, identified by the state or tribe, hereby referred to as "Tier 3." (40 CFR § 131.12(a)(3)).

The State of Idaho has previously adopted an antidegrdation policy in its regulations. The State of Idaho has now also adopted antidegradation implementation methods that were submitted by IDEQ to EPA by letter dated April 15, 2011. On November 12, 2010, the Idaho Board of Environmental Quality adopted revisions to Idaho's water quality regulations at IDAPA 58.01.02 and incorporated antidegradation implementation procedures. However revisions to Idaho regulations are not final unless approved by the Idaho State Legislature. During the 2011 legislative session, the Legislature approved most of the regulatory revisions adopted by the Board, but rejected a portion of the revisions. The regulatory revisions that were not accepted by the Legislature were deleted and new language was adopted by the legislature through HB 153 that established statutory revisions to the Idaho Code. The two documents below are the final product of this legislative rule adoption process. Those regulatory changes (approved by the legislature) are identified in the document entitled "Excerpt of official 2011 Idaho Administrative Code" and those revisions made by the Legislature to the Idaho Code are set forth in HB 153. The combination of these two sets of revisions, identified below, represent Idaho's antidegradation implementation procedures that are revised under Idaho law.

1) House Bill 153 (HB 153), which contains amendments to Sections 39-3601, 39-3602, and 39-3603 of the Idaho Code (IDEQ file: "*58-0102-1001 HO 153 – Amendment of water quality law regarding antidegradation.pdf*"). (Additions are underlined, deletions are struck out);

2) Excerpt of Official 2011 Idaho Administrative Code, Chapter 58.01.02, *Water Quality Standards*, which contain revisions in the form of additions to the State's water quality standards rule (IDEQ file: "*58-0102-1001 Sections 10, 051, & 052 from IDWQS_2011 with highlighted changes*," with cover page titled "Note on Excerpt of Official 2011 Idaho Administrative Code").

EPA's action today approves all of the revisions which constitute Idaho's antidegradation implementation methods as set forth in the revisions to Idaho Administrative Code and the Idaho Code submitted to EPA. The revisions to specific provisions that are approved are identified below. EPA is only acting on the new or revised language adopted into law and approved as regulation by the Idaho legislature and identified in the submitted documents. EPA is not acting on unchanged or previously existing language.
EPA is approving the revisions to the following provisions:

> Idaho Code sections: 39-3601, 39-3602(6), 39-3602(13), 39-3602(14), 39-3602(15), 39-3602(33), 39-3603, 39-3603(1), 39-3603(1)(a), 39-3603(1)(b), 39-3603(1)(c), 39-3603(2), 39-3603(2)(a), 39-3603(2)(b), 39-3603(2)(b)(i), 39-3603(2)(b)(ii), 39-3603(2)(b)(iii), 39-3603(2)(b)(iii)(1), 39-3603(2)(b)(iii)(2), 39-3603(2)(b)(iv), 39-3603(2)(c), 39-3603(2)(c)(i), and 39-3603(2)(c)(ii).
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> Idaho Administrative Code, Chapter 58.01.02, sections: 010.01, 010.05, 010.16, 010.26, 0.10.35, 010.45, 010.49, 010.63, 010.73, 051.01, 051.02, 051.03, 051.04, 051.05, 052.01, 052.02, 052.03, 052.04, 052.04(a), 052.04(a)(i), 052.04(a)(ii), 052.04(a)(iii), 052.04(a)(iv), 052.04(b), 052.04(c), 052.05, 052.06, 052.06(a), 052.06(b), 052.06(b)(i), 052.06(b)(ii), 052.06(b)(ii)(1) thru (5), 052.06(b)(iii), 052.06(b)(iv)(1) thru (4), 052.06(c), 052.06(c)(i), 052.06(c)(ii), 052.06(c)(iii), 052.06(c)(iii)(1) thru (5), 052.06(c)(iv), 052.06(c)(v), 052.06(d), 052.06(d)(i), 052.06(d)(ii), 052.06(d)(iii), 052.07, and 052.07(g).

EPA's water quality standards regulation at 40 CFR § 131.12(a) requires states to adopt an antidegradation policy and to identify methods for implementing that policy. Both the policy and the implementation methods must be consistent with 40 CFR 131.12. The format used below to review Idaho's antidegradation methods for consistency with 40 CFR § 131.12 first addresses when Idaho's antidegradation implementation methods are applicable; both with regard to the activities and waters covered by the methods as a whole (see Section I), and with regard to when a particular Tier of antidegradation is applicable, i.e., existing use protection (Tier 1) in accordance with 40 CFR § 131.12(a)(1), high quality water protection (Tier 2) in accordance with 40 CFR § 131.12(a)(2), and ONRW protection (Tier 3) in accordance with 40 CFR § 131.12(a)(3) (see Section II). Section II.B.1 thru 5 includes significant discussion of the various components of the approach IDEQ will use to determine when Tier 2 is applicable. Second, the processes IDEQ will use to implement the three antidegradation tiers are discussed (see Sections III, IV, and V), including the various components of a Tier 2 analysis (see Section IV.A thru F). This format, rather than addressing Idaho's revisions section by section as they appear in rule and statute, is used to ensure that each of the components of 40 CFR § 131.12 are addressed in EPA's review.

Additional provisions such as how IDEQ will address antidegradation for general permits, a provision IDEQ adopted to address "restoration projects," and revisions to Idaho's antidegradation policy are also discussed below. (see Sections VI and VII.A thru F).

I. General Applicability –Activities and Waters Covered

Section I provides EPA's basis for approving Idaho's antidegradation implementation methods as having a scope of applicability, with regard to the waters and activities that are covered, that is consistent with the CWA and 40 CFR § 131.12.

Idaho's antidegradation implementation methods are applicable to all activities that require a federal license or permit and are subject to state certification under section 401 of the Clean Water Act (CWA). IDEQ's submission to EPA included a document clarifying certain aspects of the State's implementation methods (See IDEQ file: "*58-0102-1001 Clarification of antidegradation rule and HB 153*). In that document, IDEQ outlines the scope of applicability as follows:

> *Section 052.03 provides that review of degradation potential and application of the appropriate level of protection from degradation will be triggered by an application for a new or reissued permit or license. Permit or license is then defined as a permit or license for an activity that is subject to certification by the state under section 401 of the CWA, including, for example, NPDES permits, dredge and fill permits, and FERC licenses. In addition, the rule addresses the effect of an "activity" or "discharge" on water quality, and these terms are also defined by section 401 of the CWA. Section 010.01 defines activity as one that causes a discharge to a water subject to the jurisdiction of the CWA. Discharge is then defined for the purposes of the antidegradation rule, as '"discharge" as used in section 401 of the CWA.*

See sections 010.01, 010.26, and 010.73 of Chapter 58.01.02 of the Idaho Administrative Code for the regulatory definitions of "activity," "discharge," and "permit or license," respectively. IDEQ also explains that nothing in HB 153 changes the scope of the antidegradation rule (see referenced document for IDEQ's full explanation).

Section 58.01.02.051.05 of IDEQ's water quality standards rule establishes the scope of applicability of Idaho's antidegradation provisions with regard to the waters that are covered. It provides that "*Idaho's antidegradation policy only applies to waters subject to the jurisdiction of the Clean Water Act.*"

Thus, the scope of applicability with regard to both the types of activities and waters subject to Idaho's antidegradation provisions is consistent with EPA authority and policy, i.e., discharges regulated under the CWA into waters of the United States. Thus, EPA approves sections 051.05 and 052.03 of Chapter 58.01.02 of IDEQ's water quality standards rule as being consistent with 40 C.F.R. § 131.12.

EPA has also reviewed and approves the new definitions of "activity" and "permit or license," and the revision to the "discharge" definition, sections 010.01, 010.73, and 010.26 of Chapter 58.01.02 of IDEQ's water quality standards rule, respectively, as cited above, as being integral to establishing that Idaho's antidegradation methods have an applicability consistent with 40 C.F.R. § 131.12.

II. Applicability of Particular Levels of Antidegradation Protection

Section II provides EPA's basis for approving the applicability of each tier of Idaho's antidegradation implementation methods, i.e. existing use protection (Tier 1), high quality water protection (Tier 2), and Outstanding National Resource Water protection (Tier 3), as being consistent with the CWA and 40 CFR §131.12.

A. Existing Use Protection ("Tier 1") Applicability

Idaho's Tier 1 methods apply to all waters subject to the jurisdiction of the CWA and to all activities and discharges, not just new or increased activities and discharges that would lower water quality. See section 052.01 of Chapter 58.01.02 of the Idaho Administrative Code ("*All waters receive Tier I protection.*") and section 052.05 of Chapter 58.01.02 of the Idaho Administrative Code ("*Tier I review will be performed for all new or reissued permits or licenses.*"). Thus application of Tier 1 is not limited, as Tiers 2 and 3 are, to situations where the discharge could lower water quality. This is consistent with 40 C.F.R. § 131.12(a)(1) and EPA's interpretation of its antidegradation regulation, as found in the July 7, 1998 Advance Notice of Proposed Rulemaking (ANPRM) (63 Fed. Reg. 36,742; 36,781) ("All waters of the U.S. are subject to Tier 1 protection" and "Antidegradation policies are generally implemented for Tier 1 by a review procedure that evaluates any discharge to determine whether it would impair an existing use."). Therefore EPA approves the provisions that establish the applicability of Tier 1, at sections 052.01 and 052.05 of Chapter 58.01.02 of the Idaho Administrative Code, as being consistent with 40 C.F.R. § 131.12(a)(1) because all discharges subject to the jurisdiction of the CWA will receive Tier 1 review. "Discharge" as used here is not limited to the discharge of pollutants as in the NPDES context, but rather has the broad meaning consistent with the applicability of section 401 of the CWA.

B. High Quality Water Protection ("Tier 2") Applicability

Section II.B includes discussion of Idaho's approach to identifying Tier 2 waters (i.e., the "Water body Approach"); Idaho's approach to determining if an activity or discharge would cause degradation to such waters; Idaho's definition of "degradation;" Idaho's provision that allows "insignificant degradation" without a Tier 2 review; and Idaho's provision allowing the use of offsets to degradation that would otherwise result from new or expanded activities or discharges in determining that a Tier 2 review is not required. All of these provisions are factors in Idaho's determination of whether Tier 2 is applied to any particular water and to a particular activity or discharge. EPA's bases for approving these various provisions as being consistent with the CWA and 40 CFR § 131.12 are discussed below:

1. Water body Approach

Idaho's Tier 2 methods apply to waters identified as high quality using a "waterbody-by-waterbody" approach when there is a covered activity or discharge that would cause degradation. See section 052.01 of Chapter 58.01.02 of the Idaho Administrative Code

("*Waters receiving Tier II protection will be identified using a waterbody by waterbody approach during the antidegradation review.*") and section 052.06 of Chapter 58.01.02 of the Idaho Administrative Code ("*A Tier II analysis will only be conducted for activities or discharges, subject to a permit or license, that would cause degradation.*"). Idaho's waterbody approach to identifying Tier 2 high quality waters is outlined in HB 153 (§39-3603(2)(b), Idaho Code), "Degradation" or "lower water quality" is defined by HB 153 (§39-3602(6), Idaho Code), and Idaho's approach to determining if an activity or discharge would cause degradation is outlined at IDEQ's water quality standards rule at section 58.01.02.052.04.

HB 153 specifies revisions to §39-3603(2)(b), Idaho Code, that require identification of Tier 2 high quality waters be based on "*[t]he most recent federally approved integrated report and supporting data.*" Where water bodies are identified in the integrated report as not assessed, §39-3603(2)(b)(ii), Idaho Code, provides for a determination of whether a water will receive Tier 2 protection "on *a case-by-case basis using information available at the time of a proposal for a new or reissued permit or license.*" In its response to comments on the proposed rule concerning un-assessed waters, IDEQ said the following:

> *When a discharge is proposed on such a water...DEQ will get the information that would allow assessment. That is no different than information DEQ gathers and uses now to categorize waters currently listed in the Integrated Report. DEQ's assessment process is identified in "Water Body Assessment Guidance (WBAG) II)", and can be found on DEQ's web site here:*
> *http://www.deq.idaho.gov/water/data_reports/surface_water/monitoring/overview.cfm#wbag*
> (See IDEQ's Response to Public Comments, IDEQ file: "*58-0102-1001 Antidegradation Proposed Rule, Response to Comments.pdf*, page 52.)

Applying Tier 2 review requirements only where an activity or discharge could lower water quality (cause degradation) is consistent with 40 C.F.R. § 131.12(a)(2) because the substantive Tier 2 review requirements of 40 C.F.R. § 131.12(a)(2) (e.g., "necessary to accommodate important economic or social development", etc.) only apply if the State is "allowing lower water quality." Application of Tier 2 on a "waterbody-by-waterbody" basis is also consistent with 40 C.F.R. § 131.12(a)(2). EPA explained in its July 7, 1998 ANPRM (63 Fed. Reg. 36,782-83) that "waterbody by waterbody" is an acceptable approach for identifying high quality or Tier 2 waters. Furthermore, the Sixth Circuit in *Kentucky Waterways Alliance, et al. v. EPA, et al.*, 540 F.3d 466, 477 (6th Cir. 2008), upheld EPA's interpretation of its regulations that use of a waterbody-by-waterbody approach is permissible under 40 C.F.R. § 131.12(a)(2).

In determining when Tier 2 protection is applicable, Idaho's water body approach provides for independent assessment of the water quality necessary to support recreational uses and the water quality necessary to support aquatic life uses. Thus, a water could be considered high quality for a use, and receive Tier 2 protection for water quality associated with that use, even though that water is not afforded Tier 2 protection

for water quality associated with another use. In clarifying statements that were part of IDEQ's April 15, 2011 submission to EPA, IDEQ explains:

> *Idaho Code § 39-3603(2)(b)(iii), which was added by HB 153, makes it clear: "Waterbodies identified in the integrated report as not fully supporting assessed uses will receive Tier 1 protection for the impaired aquatic life or recreational use, except as follows..." (emphasis added). Thus, only the impaired use receives tier 1 protection only, while the unimpaired use is provided tier 2 protection.*
> (See IDEQ file: "*58-0102-1001 Clarification of antidegradation rule and HB 153.*)

In addition, Idaho Code at § 39-3603(2)(b)(iii)(1) includes a component in Idaho's water body approach to protect high quality water associated with aquatic life uses. When key biological data show that a healthy balanced biological community is present, Idaho will provide Tier 2 protection to those waters even in instances where the water body is impaired for dissolved oxygen, pH, and temperature. In such instances where there is a healthy balanced biological community, Tier 2 review will be done for those parameters that are high quality. This is consistent with the concept expressed in the July 7, 1998, ANPRM, 63 Fed. Reg., 36,783, which recognizes and describes the merits of both the pollutant-by-pollutant and water body-by-water body approach, stating that "The water body-by-water body approach can also distinguish between high quality waters and high water quality and preserve high quality waters on the basis of physical and biological attributes, rather than high water quality attributes alone." Finally, as noted above, EPA's interpretation of section 131.12(a)(2) to allow a water body approach has been upheld in a federal district court decision. See *Kentucky Waterways Alliance, et al. v. EPA, et al.*, 540 F.3d 466, 477 (6th Cir. 2008)

For these reasons EPA approves the provisions that establish the applicability of Tier 2 to an activity or discharge that could lower water quality using a water body-by-water body approach, at sections 052.01 and 052.06 of Chapter 58.01.02 of the Idaho Administrative Code and §39-3603(2)(b), Idaho Code, as being consistent with 40 C.F.R. § 131.12(a)(1).

Definitions of "integrated report" were adopted by Idaho in section 58.01.02.010.49 of IDEQ's water quality standards rule and HB 153 (§39-3602(15), Idaho Code). The definitions are consistent with CWA and are approved here as providing useful information concerning implementation of §39-3603(2)(b) of the Idaho Code as set forth in HB 153.

The revised §39-3603(2)(b)(iv) of the Idaho Code provides that, "*Special resource waters listed in the department's rules shall be evaluated in the same fashion as all other waters.*" EPA approves this provision as ensuring that Idaho's "special resource waters" (SRWs at section 58.01.02.052.056 of IDEQ's preexisting water quality standards rule) will, at a minimum, receive Tier 2 protection where it is determined to be applicable in accordance with Idaho's water body approach, which EPA is approving as being consistent with 40 C.F.R. § 131.12(a)(2).

The full statutory language at §39-3603(2)(b), Idaho Code reads as follows:

(b) Identification of Tier II waters. The department will utilize a water body by water body approach in determining where Tier II protection is appropriate in addition to Tier I protection. This approach shall be based on an assessment of the chemical, physical, biological and other information regarding the water body. The most recent federally approved integrated report and supporting data will be used to determine the appropriate level of protection as follows:

(i) Water bodies identified in the integrated report as fully supporting assessed uses will be provided Tier II protection.
(ii) Water bodies identified in the integrated report as not assessed will be provided an appropriate level of protection on a case-by-case basis using information available at the time of a proposal for a new or reissued permit or license.
(iii) Water bodies identified in the integrated report as not fully supporting assessed uses will receive Tier I protection for the impaired aquatic life or recreational use, except as follows:
1. For aquatic life uses identified as impaired for dissolved oxygen, pH or temperature, if biological or aquatic habitat parameters show a healthy, balanced biological community is present, as described in the water body assessment guidance published by the department, then the water body shall receive Tier II protection for aquatic life.
2. For recreational uses, if water quality data show compliance with those levels of water quality criteria listed in the department's rules, then the water body shall receive Tier II protection for recreational uses."
(iv) Special resource waters listed in the department's rules shall be evaluated in the same fashion as all other waters.

2. <u>Definition of Degradation</u>

HB 153 revised Idaho's definition of "Degradation or lower water quality" in the Idaho Code at §39-3602(6). It reads as follows:

[A] change in a pollutant that is adverse to designated or existing uses, as calculated for a new point source, and based upon monitoring or calculated information for an existing point source increasing its discharge. Such degradation shall be calculated or measured after appropriate mixing of the discharge and receiving water body.

This definition replaces previous definitions of "Lower water quality" that were in statute and rule at section 39-3602(13) of the Idaho Code and section 58.01.02.010.49 of the Idaho Administrative Code, respectively. Both of the deleted definitions used the concept of "measureable" to establish whether degradation would occur. In its October 1, 2010 comments on IDEQ's proposed antidegradation implementation rule, EPA expressed serious concern with this use of "measurable," stating that "...the application of measurable acts as a de facto *de minimis* provision, without a cumulative cap." (See Christine Psyk, EPA to Barry Burnell, IDEQ, October 1, 2010). These revisions address that concern.

EPA is approving the new definition of "Degradation or lower water quality" in section 39-3602(6) of the Idaho Code for the reasons discussed below.

Idaho's new definition of "Degradation or lower water quality" contains the phrase "*...a change in a pollutant that is adverse to designated or existing uses.*" Idaho has clarified that this phrase "adverse to designated or existing uses" means that the change in pollutant would result in a reduction in water quality. The reduction in water quality need not be of such magnitude that it would impair uses in order for that reduction to be given appropriate consideration under IDEQ's antidegradation policy and implementation procedures. This clarification by IDEQ is contained in two documents: *IDEQ's response to EPA's comments* of October 1, 2010 concerning the term "adverse" and IDEQ's previous interpretation of "adverse" in a letter to EPA. In its response to comments, IDEQ explained:

> *DEQ agrees completely that "lowering of water quality" need not be of a degree that would violate criteria in order to be given appropriate consideration under DEQ's antidegradation policy.'*
> (See IDEQ's Response to Public Comments, IDEQ file: "*58-0102-1001 Antidegradation Proposed Rule, Response to Comments.pdf*, page 5.)

Furthermore, IDEQ's previous interpretation of "adverse" as used in this context is explained in a letter to EPA:

> *DEQ views a reduction in water quality as synonymous with adverse change in water quality, i.e., a decrease in dissolved oxygen, or an increase in temperature or concentration of toxic substances.*
> (See letter from Barry Burnell, IDEQ to Jannine Jennings, EPA, August 3, 2007.)

As explained in EPA's October 1, 2010 comments on IDEQ's proposed antidegradation implementation rule, it is important that "adverse" does not mean that a proposed lowering of water quality must be of a degree that would impair uses for that lowering of water quality to be given appropriate consideration under IDEQ's antidegradation policy and implementation procedures. This is because Tier 2 and Tier 3 of the federal antidegradation policy address protection of water quality that is better than necessary to protect CWA section 101(a)(2) goals (40 C.F.R. § 131.12(a)(2)) and prohibit (with a limited short term and temporary exception) lowering of water quality in Outstanding National Resource Waters (40 C.F.R. § 131.12(a)(3)). The revised definition addresses these concerns.

In the second part of the revised definition, the State determines the change in pollutant concentration based on calculated (i.e., utilizing modeling) or monitoring information after appropriate mixing of the discharge. Whether a proposed discharge would result in degradation can and often does require modeling to identify water quality effects that cannot be measured in the receiving water, such as the effects of authorized pollutant loading that has not yet occurred. Section 052.04(b) of IDEQ's rule provides for modeling of receiving water quality. It says that "*Receiving water quality will be the*

quality measured or modeled as appropriate..." This approach to determining water quality concentration is reasonable and consistent with the methods used to assess water quality in developing NDPES permits. (See 2010 US EPA, EPA-833-K-10-001, Permit Writers' Manual, Section 6.3.2, p. 6-23.)

3. Determination of Insignificant Degradation

Idaho's antidegradation implementation methods found at Idaho Code §39-3603(2)(c) also include a provision which allows IDEQ to determine a proposed lowering of water quality is insignificant and, therefore, exempt from the substantive Tier 2 analysis requirements, if that lowering of water quality will not cumulatively use more than 10% of the receiving water's assimilative capacity. See §39-3603(2)(c), Idaho Code, as set forth in HB 153 (*"If an activity or discharge is determined to be insignificant, then no further Tier II analysis for other source controls, alternatives analysis or socioeconomic justification is required."*) and §39-3603(2)(c)(i), Idaho Code, as set forth in HB 153 (*"The department shall determine insignificance when the proposed change in an activity or discharge, from conditions as of July 1, 2011, will not cumulatively decrease assimilative capacity by more than ten percent (10%)"*).

EPA, in its July 7, 1998, ANPRM, discussed the use of significance evaluations in state antidegradation procedures (63 Fed. Reg. 36,783). Although EPA's antidegradation policy at 40 C.F.R. § 131.12(a)(2) does not expressly address insignificance determinations, EPA explained, that "Applying antidegradation requirements only to activities that will result in significant degradation is a useful approach that allows States and Tribes to focus limited resources where they may result in the greatest environmental protection" (63 Fed. Reg. 36,783).

Furthermore, in August 2005, EPA issued a memorandum from the Director of the Office of Science and Technology recommending that, where States and Tribes adopt *de minimis* provisions, such provisions should consider cumulative loss of water quality:

> *To address situations where there are multiple or repeated increases in discharges, OST recommends that states and tribes incorporate a cumulative cap on the use of total assimilative capacity (i.e., the baseline assimilative capacity of a waterbody established at a specified point in time). This approach creates a backstop so that multiple or repeated discharges to a waterbody over time do not result in the majority of the total assimilative capacity being used without a single antidegradation review. For instance, the state or tribe may choose to subject any lowering of water quality to antidegradation review after a certain percentage of the total assimilative capacity has been used. This ensures that where the ambient water quality is lowered closer to the criteria levels, the state or tribe will conduct an antidegradation review after a certain point to evaluate the necessity and importance of each lowering, regardless of the amount of assimilative capacity that would be used.*

In addition, the *de minimis* issue was considered at length in developing the water quality

guidance for the Great Lakes States (see Water Quality Guidance for the Great Lakes System, 40 C.F.R. § 132). Relying on input offered during the four-year open-public process, the directors of the eight Great Lakes States and EPA technical experts reached a consensus on a significance threshold value of ten percent of the available assimilative capacity for individual discharges, coupled with a cumulative cap. They determined that this threshold represented a reasonable balance between the need to limit the number of detailed antidegradation reviews and the need to maintain and protect high quality waters. They reached a consensus that any individual decision resulting in less than a ten percent loss of assimilative capacity for non-bioaccumulative contaminants represents minimal risk to the receiving water, and exempting such proposals from antidegradation review is fully consistent with the objectives and goals of the Clean Water Act. See Proposed Water Quality Guidance for Great Lakes System, 58 Fed. Reg. 20,802; 20,902-906 (April 16, 1993); Great Lakes System: Supplementary Information Document (SID) (March 1995), pp. 207-208.

In the Great Lakes System: Supplementary Information Document (SID), EPA explained that states had the discretion to include threshold provisions. SID at 208. See also SID at 213 ("An antidegradation review is required whenever a 'significant' lowering of water quality is considered"). EPA again recognized the benefits of using such a threshold:

> *De minimis provisions provide a means for States to differentiate between actions that will result in increased loading of a pollutant to a receiving water that is unlikely to have a significant impact on water quality and those that are likely to do so and focus review efforts on actions that will degrade water quality.*

SID at 208. See also SID at 205 (a *de minimis* test "allow[s] [] States to differentiate between activities that are likely to have an inconsequential effect on water quality and those that are likely to have significant effects and to focus their efforts on those that are of the most consequence to water quality"). Where states elect to include a threshold provision, EPA has recommended that states adopt an approach based on the proposed Water Quality Guidance for the Great Lakes System. SID at 209. Specifically, EPA recommended that such thresholds be "based on a percentage of the unused assimilative capacity to protect against over-allocation of the water body." SID at 209. With regard to the percentage reduction in assimilative capacity that might be appropriate to use in a threshold provision, EPA stated that "[i]t is reasonable to assume that loading increases . . . that will use *less than ten percent* of the remaining assimilative capacity in a water body will have a negligible effect on ambient water quality." SID at 208 (emphasis added).

Given that EPA, in the Great Lakes SID, has stated that loading increases for individual sources of less than 10% of assimilative capacity will have a negligible effect on ambient water quality, it is reasonable to conclude that Idaho's allowance of up to and including a 10 percent reduction in assimilative capacity for parameters from all sources cumulatively will also have a negligible impact on water quality.

Idaho's provision is also consistent with EPA policy, as articulated in the ANPRM and EPA's August 2005 memorandum, because it includes a cumulative cap on *de minimis*

discharges based on assimilative capacity as it exists at some specified point in time. The Idaho procedure's exemption from a Tier 2 review is limited to activities causing a 10 percent or less reduction in a water's assimilative capacity on a cumulative basis, with a baseline established as of July 1, 2011.

Once one or more activities or discharges are allowed to cumulatively lower a water's assimilative capacity for a given parameter by more than 10% of what was available for allocation on July 1, 2011, subsequent activities or discharges that would lower water quality for that parameter would be subject to a full Tier 2 review in accordance with section 58.01.02.052.06 of IDEQ's water quality standards rule. For this to apply, a water must first be identified as high quality in accordance with Idaho's water body approach to Tier 2 protection at §39-3603(2)(b), Idaho Code.

EPA's interpretation that 40 C.F.R. § 131.12(a)(2) affords states discretion to determine what constitutes a "lowering" is reasonable. EPA believes Idaho's use of a 10 percent threshold in reduced assimilative capacity, considered on a cumulative basis, will result in a minimal impact on water quality and therefore is an acceptable threshold below which the substantive requirements of a Tier 2 analysis are not required. (See discussion above). EPA understands the provision to mean that in all other circumstances— that is, any proposed lowering of water quality exceeding the 10% cumulative cap – the discharge will be subject to a full Tier 2 analysis.

Furthermore, the importance of a cumulative cap, which Idaho has included in its water quality standards, has been affirmed by the courts. *See Kentucky Waterways Alliance, et al. v. EPA, et al.*, 540 F.3d 466 (6th Cir. 2008); *Ohio Valley Environmental Coalition. v. Horinko*, 279 F.Supp.2d 732 (S.D. W.Va. 2003). In *Ohio Valley*, the Court found it was reasonable for EPA to conclude, based on the record, that West Virginia could include a *de minimus* cap of up to ten percent of available assimilative capacity for a specific pollutant. The court relied heavily on EPA's findings in the Guidance for the Great Lakes States rulemaking regarding the ten percent figure. *See Ohio Valley Envtl. Coal.*, 279 F.Supp.2d at 769-770. However, the Court held that EPA's approval of a twenty percent cumulative cap was arbitrary and capricious because there was no evidence cited in the record to explain that, under such a cumulative cap, any degradation to water quality would truly be *de minimis*. *Ohio Valley Envtl. Coal.*, 279 F.Supp.2d at 770-771. Idaho's *de minimis* provision, which adopts a lower cumulative cap of ten percent, is consistent with the Court's view that a *de minimis* provision with a cumulative cap based on assimilative capacity may be acceptable.

For all the reason discussed above EPA approves the insignificant degradation provisions in §39-3603(2)(c) of the Idaho Code as set forth in HB 153.

4. <u>Determination of Whether Degradation would Occur</u>

The following is the Idaho regulatory language which addresses the determination of whether degradation would occur:

052.04. Evaluation of Effect of an Activity or Discharge on Water Quality*. The Department will evaluate the effect on water quality for each pollutant. The Department will determine whether an activity or discharge results in an improvement, no change, or degradation of water quality.*

a. *Effect on water quality will be based on the calculated change in concentration in the receiving water as a result of a new or reissued permit or license. With respect to a discharge, this calculation will take into account dilution using appropriate mixing of the receiving water under critical conditions coupled with the design flow of the discharge. For a reissued permit or license, the calculated change will be the difference in water quality that would result from the activity or discharge as authorized in the current permit or license and the water quality that would result from the activity or discharge as proposed in the reissued permit or license. For a new permit or license, the calculated change will be the difference between the existing receiving water quality and water quality that would result from the activity or discharge as proposed in the new permit or license.*

i. Current Discharge Quality. For pollutants that are currently limited, current discharge quality shall be based on limits in the current permit or license. For pollutants not currently limited, current discharge quality shall be based on available discharge quality data collected within five years of the application for a permit or license or other relevant information.

ii. Proposed Quality for an Existing Discharge. Future discharge quality shall be based on proposed permit limits. For pollutants not limited in the proposed permit or license, future discharge quality will be estimated from available discharge quality data since the last permit or license was issued accounting for any changes in production, treatment or operation. For the proposed discharge of a new pollutant or a proposed increased discharge of a pollutant, future discharge quality will be estimated based on information provided by the applicant or other relevant information.

iii. New Permit Limits for an Existing Discharge. When new permit limits are proposed for the first time for a pollutant in an existing discharge, then for purposes of calculating the change in water quality, any statistical procedures used to derive the proposed new limits will be applied to past discharge quality as well, where appropriate.

iv. Proposed Quality for a New Discharge. Future discharge quality shall be based on proposed permit limits. For pollutants not limited in the proposed permit or license, future discharge quality will be based on information provided by the applicant or other relevant information.

b. *Receiving water quality will be the quality measured, or modeled as appropriate, immediately above the discharge for flowing waters and outside any Department authorized mixing zone for lakes and reservoirs.*

Section 58.01.02.052.04 of IDEQ's water quality standards rule (presented above), outlines Idaho's approach to determining if an activity or discharge would cause degradation. For a reissued permit or license, section 58.01.02.052.04 compares the receiving water quality that could result from the activity as currently authorized with the receiving water quality that could result if the activity was reauthorized as proposed. For a new permit or license, section 58.01.02.052.04 requires a comparison of the existing receiving water quality to the water quality that would result from the activity or discharge that is being proposed in the new permit or license. In both instances, a Tier 2 review is only required if the comparison indicates that authorization of the activity as proposed could result in significant degradation (i.e., a significant lowering or worsening of water quality) relative to what was previously authorized, or, if the discharge is a new one, relative to the quality of the receiving water as it is without the proposed new discharge. For previously authorized discharges, if the comparison does not show a lowering of water quality relative to what was previously authorized, issuance of the permit or license would not be considered to cause degradation and a Tier 2 review would not be required (section 58.01.02.052.06). This method is consistent with 40 C.F.R. § 131.12(a)(2) because it results in a Tier 2 review being required when the state proposes to allow a lowering of water quality. The substantive evaluation at 40 C.F.R. § 131.12(a)(2) is only required when the State is allowing lower water quality.

EPA Region 10 sought clarification from the EPA Office of Water regarding how 40 C.F.R. § 131.12(a)(2) is to be interpreted in the context of NPDES permits reissuance. Region 10 also sought clarification as to the activities that trigger Tier 2 review, as discussed in EPA's Water Quality Standards Handbook, with regard to the reissuance of NPDES permits.

In a July 7, 2011 policy clarification memorandum from Ellen Gilinsky (Senior Policy Advisor in EPA's Office of Water) to EPA Region 10 Office of Water and Watersheds, EPA Office of Water clarified "that it is reasonable to interpret the regulations such that the need for a Tier 2 antidegradation review upon permit reissuance is based on whether an NPDES permit would authorize new or increased discharges resulting in a lowering of water quality compared to what was previously authorized." This memorandum also clarifies that "Idaho's approach of not requiring a Tier 2 review in those instances when there is no change in the authorized discharge in the reissued permit is consistent with the requirements of the Clean Water Act and EPA's antidegradation requirements at 40 C.F.R. § 131.12(a)(2) ...regardless of whether or not a formal antidegradation review was done in the past." As to the language in the Water Quality Standards Handbook, the July 7, 2011 memorandum finds that the Handbook language is unclear as to how to apply antidegradation requirements to reissued permits in which there is no change in authorized limits. Thus, there is nothing in the Handbook that forecloses the interpretation of 40 C.F.R. § 131.12(a)(2) as clarified in the memorandum.

Furthermore, IDEQ received comments asserting that if a facility discharges at less than its permitted design flow, this should be a basis to assess whether a reissued permit results in a lowering of water quality. The commenter asserted that Idaho has failed to

implement an antidegradation program in the past and argued that a determination of degradation should be based on "actual levels of contaminants currently in the waterways." (see IDEQ's Response to Public Comments, IDEQ file: "*58-0102-1001 Antidegradation Proposed Rule, Response to Comments.pdf*, pages 45-46). In separate comments on draft NPDES permits for discharges in the State of Idaho, the same commenter cited a paragraph in the EPA Water Quality Standards Handbook (2d Ed., 1994) that uses the terminology "actual current loadings" when discussing lowering of water quality.

The commenter also presented a hypothetical example where a facility operates at a "current" discharge flow (translated into lbs/day) that is less than the discharge that is authorized through its NPDES permit based on design flow of the treatment plant. The commenter believes that in these instances where a facility operates at levels below those authorized as daily mass limits, Idaho DEQ should evaluate the future impact of permit reissuance based on this difference in discharge between the actual and permitted discharge rates by performing an antidegradation analysis.

EPA does not agree that the approach proposed by the commenter to determine current conditions is required by federal policy or is more appropriate than that adopted by IDEQ. The commenter focuses on "current water quality in the receiving water," by which it is assumed that actual flows from the treatment plant should be used to evaluate the impact of a reissued permit, rather than the levels authorized in the NPDES permit.

The commenter's example is too simplistic and does not take into account how facilities must operate to ensure compliance with federal law. NPDES permit limits, in the case of POTWs, are based on design flow of a facility (i.e., the flow that a facility is built to handle). (40 C.F.R. § 122.45(b)(1).) Actual flows from a treatment plant, and thus the resulting levels of contaminants in a waterway, vary based on several factors (including seasonal and diurnal fluctuations). According to Section 5.2.1 of EPA's *Technical Support Document for Water Quality-based Toxics Control*, EPA/505/2-90-001, PB91-127415, March 1991, "effluent quality and quantity vary over time in terms of volumes discharged and constituent concentrations. Variations occur due to a number of factors, including changes in human activity over a 24-hour period for publicly owned treatment works (POTWs), changes in production cycles for industries, variation in responses of wastewater treatment systems to influent changes, variation in treatment system performance, and changes in climate." Therefore, facilities do not have a fixed "current" flow or discharge as posited in the commenter's hypothetical example. Nor is it appropriate to expect the "current" flow to be equal to the authorized or design flow. If a facility intends to stay in compliance with effluent limits and maximum authorized daily mass limits, the current discharge (if it is expressed as an average annual discharge) will need to be less than the authorized discharge because variability in flow needs to be anticipated and accommodated. The hypothetical example posed by the commenter does not take this factor into account.

The commenter fails to specify how the actual level of discharge is expressed in the example. Actual flows can be expressed in several forms (i.e., average annual, maximum

monthly, maximum daily, peak hour). For example, the discharge in the commenter's example might be based on the average flows over a long period of time (e.g. one year or longer). If the long-term average flow is 0.50 mgd (millions of gallons per day), the actual maximum monthly flow likely far exceeds that level. For example, assuming the coefficient of variation (CV) for effluent flow is 0.6, then the maximum expected monthly average flow rate, based on daily measurements, with a 1% exceedance probability, would be 0.64 mgd (see TSD at Table 5-2, Page 103). Of course, maximum weekly flows and maximum daily flows would be higher still. Using the same assumptions for variability and exceedance probability, the maximum expected daily flow at this facility would be 1.56 mgd.

Developing load limits for a permit based solely on long-term average flow is not appropriate. Since any violation of an effluent limit is an enforceable violation of the CWA, permit limits must be set at the upper bounds of acceptable performance, as opposed to the acceptable long-term average level of performance (see TSD at Section 5.2.2). Developing load limits based on long-term average flow would not properly account for effluent variability, in flow and concentration, which would in turn lead to effluent limits that are effectively more stringent than necessary to ensure compliance with water quality standards and technology-based requirements. Additionally, regulations governing reasonable potential analyses in NPDES permits do require permitting authorities to consider effluent variability in that analysis (40 C.F.R. § 122.44(d)(1)(ii)).

In summary, EPA believes it is consistent with 40 C.F.R. § 131.12(a)(2) for a state to conclude that reissuance of a permit or license when there is no change in the authorized discharge in the reissued permit does not lead to a lowering of water quality that requires a Tier 2 review. Furthermore, the fact that a facility may discharge at less than its permitted design flow is not a valid basis to assess whether a reissued permit results in a lowering of water quality. Idaho's provision is a reasonable approach for determining if a proposed permit action would allow a lowering of water quality and require a Tier 2 review. The July 7, 2011, memorandum from the Office of Water to Region 10 confirms this interpretation and cites other instances where a similar interpretation and approach to that of Idaho's was approved by EPA in other state antidegradation procedures and the Water Quality Guidance for the Great Lakes System.

Therefore, EPA approves §58.01.02.052.04(a)(i-iv) of the Idaho Administrative Code for the reasons discussed above.

<u>Definitions of "Existing Activity or Discharge" and "New Activity or Discharge"</u>
Idaho's regulations (sections 58.01.02.010.63 and 58.01.02.010.35 of IDEQ's water quality standards rule) define "new" and "existing" activities or discharges, as follows:

> ***Existing Activity or Discharge.*** *An Activity or Discharge that has been previously authorized or did not previously require authorization.*

New Activity or Discharge. *An activity or discharge that has not been previously authorized. Existing activities or discharges not currently permitted or licensed will be presumed to be new unless the Director determines to the contrary based on review of available evidence. An activity or discharge that has previously taken place without the need for a license or permit is not a new activity or discharge when first licensed or permitted.*

Idaho's regulations (section 58.01.02.052.06) further specify that a Tier 2 antidegradation analysis will "only be conducted for activities or discharges, subject to a permit or license that cause degradation." This provision does not differentiate between "new" or "existing" activities or discharges. As explained elsewhere in this document, Idaho's regulations governing implementation of antidegradation (section 58.01.02.052.04.a) state: "For a new permit or license, the calculated change will be the difference between the existing receiving water quality and water quality that would result from the activity or discharge as proposed in the new permit or license." Furthermore, sections 58.01.02.052.04.a.i-iii describe how existing and future discharge quality should be determined in scenarios for new or existing discharges. For pollutants not currently subject to permit limits, current discharge quality is based on available data collected within five years of the permit application. Future discharge quality is based on proposed permit limits.

Under the foregoing provisions, Idaho's regulations operate to exclude from Tier 2 review some existing activities when they are first licensed or permitted, if the activities will produce no change or an improvement in water quality based on a comparison between "existing receiving water quality" and the water quality that would result from the activity or discharge as proposed in a new permit or license.

Idaho received comments on its proposed definition of "new activity or discharge" stating that under this definition, "degradation caused by existing activities and discharges which do not have lawful permits or licenses to operate can be grandfathered in for antidegradation review purposes by the Director." The commenter further stated that this definition "creates an unacceptable loophole" for "existing illegal activity." The State responded to these comments by explaining that the definition gives the DEQ Director "discretion to consider extenuating circumstances for previously authorized discharges whose permit or license has lapsed." In subsequent communication with EPA, IDEQ has reiterated that this provision does not create a loophole for existing illegal activity. The State's use of the term lapse in its response to comments refers to permits that have expired but are administratively extended.

EPA believes that it would not be appropriate to allow dischargers that previously required authorization to discharge but were discharging without such license to be granted a permit or license for the first time without a Tier 2 antidegradation review, if they have been discharging to high quality waters. Nor would it be appropriate to reissue a permit for discharges to high quality waters without a Tier 2 antidegradation review where a permit had expired and not been administratively extended. Furthermore, it would be inappropriate to exclude from Tier 2 review any discharger that had terminated its discharge at some previous time and was now seeking reauthorization, since at the

time of the new permit issuance its loading would not have been accounted for. Where a permit has been administratively continued it would not need to undergo Tier 2 reviewed. Based on clarification from the State of Idaho in an email communication from Barry Burnell, IDEQ Water Quality Division Administrator, to Christine Psyk, Region 10 Office of Water and Watershed Associate Director, (dated August 17, 2011), EPA believes the situations described above would not be treated, under the discretion of the Director, as existing discharges that did not require a Tier 2 analysis under the definition for New Activity or Discharge.

With that understanding, EPA is approving Idaho's definitions of new and existing discharge or activity, as well as sections 58.01.02.052.04 and 58.01.02.052.06 of Idaho's regulations, as applied to existing discharges or activities.

Idaho's approach to application of Tier 2 review to existing discharges is consistent with EPA's regulations at 40 C.F.R. § 131.12(a)(2) and policy. EPA's regulations never intended to allow existing dischargers who are discharging without a required permit or license to be granted a permit or license for the first time without the need for an analysis of whether the discharges are necessary to accommodate important economic or social development. In contrast, existing dischargers that did *not* previously require authorization, but are applying for a license or permit for the first time because regulations or a court decision require that their discharges be authorized, do not generally need to undergo a Tier 2 review, as long as the discharger is not proposing to lower water quality beyond the quality that currently exists in the receiving water. In such cases, a Tier 2 antidegradation analysis is not required because the permitting authority is not authorizing "lower water quality," given that the discharge has already occurred without the need for authorization – either by statute, regulation, or court decision.

For the foregoing reasons, EPA approves Idaho's definitions of "existing activity or discharge" and "new activity or discharge," respectively, as well as sections 58.01.02.052.04 and 58.01.02.052.06 of Idaho's regulations as applied to existing discharges.

EPA also approves section 58.01.02.052.04(b) which explains how the water quality of a receiving will be measured or modeled, as appropriate. The determination of whether a water is high quality for a given parameter, whether there is assimilative capacity for the parameter, and whether a proposed discharge would result in degradation can and often does require modeling to identify water quality effects that cannot be measured in the receiving water, such as the effects of authorized pollutant loading that has not yet occurred. Section 052.04(b) of IDEQ's rule provides for modeling of receiving water quality. It says that "*Receiving water quality will be the quality measured or modeled as appropriate...*"

To ensure that waters are not "over allocated" if additional pollutant loadings are authorized for proposed or new or increased activities, EPA generally expects calculations of current/existing receiving water quality to account for all loadings,

including any that are authorized or unused. That is, all previously authorized loads, whether utilized or not, would be counted towards existing receiving water conditions when determining if additional pollutant loadings can be authorized while still ensuring that water quality criteria will be met and uses are protected. Utilizing modeling to determine future water quality is appropriate and frequently utilized as part of the NPDES permitting process, and appropriate in the context of an antidegradation evaluation.

5. Offsets

The following is the Idaho regulatory language addressing offsets.

> ***052.04. c Evaluation of Effect of an Activity or Discharge on Water Quality.*** *Offsets. In determining the effect of an activity or discharge on water quality of Tier II or Tier III waters, the Department may take into account reductions in pollution from other sources that are tied to the proposed activity or discharge. These offsets in pollution must be upstream of the degradation in water quality due to the proposed activity or discharge and occur before the activity or discharge is allowed to begin. The applicant seeking a permit or license for an activity or discharge based on offsets will be held responsible for assuring offsets are achieved and maintained as a condition of their permit or license.*

In its July 7, 1998 ANPRM (63 Fed. Reg. 36,785-87), EPA explained that it has allowed the use of offsets to ensure that the water quality of Outstanding National Resource Waters (ONRWs) is maintained and protected, i.e., "EPA has also allowed a proposed activity that will result in a new or expanded source where the applicant agrees to implement or finance upstream controls of point or nonpoint sources sufficient to offset the water quality effects of the proposed activity." In other words, states may offset the water quality effects of proposed activities on ONRWs by implementing upstream controls on existing activities. ONRW is the highest tier of protection in EPA's antidegradation policy at 40 C.F.R. § 131.12. EPA believes that it is also reasonable to allow the use of offsets in determining the effects of an activity or discharge on high quality waters during a Tier 2 review because Tier 2 is a less stringent level of water quality protection than Tier 3. Therefore, EPA is approving the use of offsets as described at section 58.01.02.052.04.c of IDEQ's rule (for use in Tier 2 and Tier 3) as being consistent with 40 C.F.R. § 131.12(a)(2) and (3).

C. Outstanding National Resource Water Protection Applicability ("Tier 3," referred to as "Outstanding Resource Waters" by Idaho)

Idaho refers to Tier 3 as Outstanding Resource Waters (ORW) which in federal regulations is referred to as ONRWs. The applicability of Tier 3 ORW protection in Idaho requires that a water be designated as an ORW by the Idaho legislature. This requirement is clear in revisions at several sections of Idaho rule and statute. Section 58.01.02.051.03 of IDEQ's water quality standards rule was revised to include "*designated by the legislature*" in the discussion of where high quality waters constitute

ORWs. New language at section 58.01.02.052.07 of IDEQ's water quality standards rule provides "*ORWs are designated by the legislature;*" and the new ORW policy statement created by HB 153 at §39-3603(1)(c), Idaho Code, provides "*Where an outstanding resource water has been designated by the legislature...*".

EPA approves the provisions requiring legislative designation of ORWs at sections 58.01.02.051.03 and 58.01.02.052.07 of IDEQ's water quality standards rule and Idaho Code §39-3603(1)(c), as revised in HB 153, as being consistent with 40 C.F.R. § 131.12(a)(3) because EPA's interpretation of 40 C.F.R. § 131.12(a)(3) in the July 7, 1998 ANPRM (63 Fed. Reg. 36,786) recognizes that ONRW protection requires explicit designation (see section III.D.5.a "Designating ONRWs").

III. Existing Use Protection ("Tier 1") Process

A. Processes for identifying existing uses and the water quality necessary for their protection.

Section 58.01.02.052.05 of IDEQ's water quality standards rule provides that, "*Identification of existing uses and the water quality necessary for their protection will be based on all available information, including any water quality related data and information submitted during the public comment period for the permit or license.*" This is consistent with EPA's position as stated in a letter of September 5, 2008, responding to questions concerning existing uses, i.e., "...EPA interprets the definition of "existing use" to require consideration of the available data and information on both actual use and water quality..." (See Denise Keehner, Director EPA's Standards and Health Protection Division to Derek Smithee, Oklahoma Water Resources Board, September 5, 2008). EPA approves section 58.01.02.052.05 of IDEQ's water quality standards rule as being consistent with 40 C.F.R. § 131.12(a)(1) because it provides that IDEQ will utilize "all available information," consistent with EPA's position stated above, including information submitted during the opportunity for public comment, to ensure that existing uses are identified and protected.

IV. High Quality Water Protection ("Tier 2") Analysis

Section IV provides EPA's basis for approving Idaho's antidegradation implementation methods addressing Tier 2 analysis as being consistent with the CWA and 40 CFR 131.12. As discussed at Section II.B, Idado's Tier 2 procedures are applicable to an activity or discharge that would cause significant degradation to a water identified as high quality using a "waterbody-by-waterbody" approach. Once Idaho determines that Tier 2 is applicable, it must perform an analysis to determine if the activity or discharge would provide important economic or social development; perform an alternatives analysis to determine if a lowering of water quality is necessary; conduct public participation and intergovernmental review; assure that the highest statutory and regulatory requirements for point sources and cost-effective and reasonable BMPs for nonpoint source control are achieved; and assure that the water quality will be adequate to protect existing uses are required, consistent with 40 CFR 131.12(a)(2). Idaho also ensures that in allowing any

lowering of water quality, water quality must be maintained at levels that meet the State's water quality criteria. Each of these components of Idaho's Tier 2 analysis is discussed below.

A. Analysis to determine if a proposed activity would provide important economic or social development in the area in which the affected waters are located.

Idaho's process for determining if a proposed activity would accommodate important economic or social development is outlined in IDEQ's water quality standards rule at section 58.01.02.052.06.c and is approved as being consistent with EPA's regulation at 40 C.F.R. § 131.12(a)(2), as described in EPA's July 7, 1998 ANPRM (63 Fed. Reg. 36,784). In its July 7, 1998 ANPRM, EPA explained that absent important social or economic benefit, degradation under Tier 2 must not be allowed and listed the following as examples of factors that may be assessed in determining if an activity would provide such benefit: "(a) employment (i.e., increasing, maintaining, or avoiding a reduction in employment), (b) increased production, (c) improved community tax base, (d) housing, and (e) correction of an environmental or public health problem." IDEQ's process includes identification of the affected community (section 58.01.02.052.06.c.i) and is consistent with EPA's expectations because it specifies appropriate factors to consider regarding economic or social development associated with the proposed activity in that community, such as changes in employment, household incomes, and tax base, as well as provision of necessary services to the community, potential health impacts, and other factors (section 58.01.02.052.06.c.ii and iii). Section 58.01.02.052.06.c of IDEQ's water quality standards rule is presented below:

> *c. Socioeconomic Justification. Degradation of water quality deemed necessary must also be determined by the Department to accommodate important economic or social development. Therefore, the applicant seeking authorization to degrade water quality must at a minimum identify the important economic or social development for which lowering water quality is necessary and should use the following steps to demonstrate this:*
> *i. Identify the affected community;*
> *ii. Describe the important social or economic development associated with the activity which can include cleanup/restoration of a closed facility;*
> *iii. Identify the relevant social, economic and environmental health benefits and costs associated with the proposed degradation in water quality for the preferred alternative. Benefits and costs that must be analyzed include, but are not limited to:*
> *(1) Economic benefits to the community such as changes in employment, household incomes and tax base;*
> *(2) Provision of necessary services to the community;*
> *(3) Potential health impacts related to the proposed activity;*
> *(4) Impacts to direct and indirect uses associated with high quality water, e.g., fishing, recreation, and tourism; and*
> *(5) Retention of assimilative capacity for future activities or discharges.*

iv. Factors identified in the socioeconomic justification should be quantified whenever possible but for those factors that cannot be quantified a qualitative description of the impacts may be accepted; and
v. If the Department determines that more information is required, then the Department may require the applicant to provide further information or seek additional sources of information.

B. <u>Analysis to identify if it is necessary to lower water quality to realize the economic or social development associated with the proposed activity (i.e., alternatives analysis to determine if there is a least degrading feasible alternative that can be implemented to avoid or reduce the degree of degradation).</u>

40 C.F.R. § 131.12(a)(2) specifies that a State may allow lower water quality only if it finds that the following two conditions are satisfied: 1) the activity that would lower water quality provides "important economic or social development" and 2) lower water quality is "necessary to accommodate" such development.

Idaho's water quality standards rule addresses the first condition at section 58.01.02.052.06.c, and is approved as consistent with 40 C.F.R. § 131.12(a)(2) because IDEQ's rule provides procedures, including a public process, to evaluate whether an activity that would lower water quality is necessary to accommodate important economic or social development, as discussed above. Addressing the second question involves an analysis of feasible alternatives to determine if the important economic or social development associated with the project could be realized without degradation, or with a reduced degree of degradation (see 63 Fed. Reg. 36,784).

In its July 7, 1998 ANPRM (63 Fed. Reg. 36,784), EPA explained that it has recommended an analysis of pollution control/pollution prevention alternatives as an approach to determining if a lowering of water quality is necessary, and such an approach can be an effective means to maintaining and protecting remaining assimilative capacity of receiving waters. EPA further explained that in conducting alternatives analyses, States must ensure that all feasible alternatives to allowing degradation have been adequately evaluated and that the least degrading reasonable alternative is implemented. EPA noted that where less-degrading alternatives are more costly than the pollution controls associated with the project proposal, the State should determine whether the costs of the less-degrading alternative are reasonable.

Idaho's procedures require alternatives analysis to address the second condition at section 58.01.02.052.06.b of IDEQ's water quality standards rule:

Degradation will be deemed necessary only if there are no reasonable alternatives to discharging at the levels proposed. The applicant seeking authorization to degrade high water quality must provide an analysis of alternatives aimed at selecting the best combination of site, structural, managerial and treatment approaches that can be reasonably implemented to avoid or minimize the degradation of water quality.

Section 58.01.02.052.06.b.ii includes a list of alternatives that must be evaluated as appropriate for the situation and section 58.01.02.052.06.b.iii provides IDEQ with the ability to ensure appropriate alternatives are evaluated ("*The Department retains the discretion to require the applicant to examine specific alternatives or provide additional information to conduct the analysis.*"). Section 58.01.02.052.06.b.iv provides direction for selecting the alternative and requires consideration of "*all technologically feasible alternatives*" (see section 58.01.02.052.06.b.iv (1) & (2)). Section 58.01.02.052.06.b.iv(4) provides for selection of the least degrading reasonable alternative, taking into account the economic, technological, and environmental considerations at section 58.01.02.052.06.b.iv(1), (2), and (3) ("*Select the least degrading option or show that a more degrading alternative is justified based on Subsections 052.06.b.iv(1), 052.06.b.iv(2), and 052.06.b.iv(3) above.*").

Because IDEQ has included a method that directs the applicant to evaluate all technologically feasible alternatives to the proposed discharge, and choose the least degrading reasonable alternative, section 58.01.02.052.06.b of Idaho's water quality standards rule is approved as being consistent with EPA's Tier 2 regulation (40 C.F.R. § 131.12(a)(2)) and the Agency's interpretation of such regulation in its July 7, 1998 ANPRM (63 Fed. Reg. 36,784).

C. Process and timing for public participation and intergovernmental coordination.

Section 58.01.02.052.06.d.ii of IDEQ's water quality standards rule provides:

> *The Department shall review all pertinent information and, after intergovernmental coordination, public notice and input, make a determination as to whether there is assurance that the other source controls specified in Subsection 052.08.a* **[should be 052.06.a]** *shall be achieved, and whether degradation of water quality is necessary to accommodate important economic or social development.*

Furthermore, section 58.01.02.052.06.d.iii of IDEQ's water quality standards rule provides that "*The Department will satisfy the public participation provisions of Idaho's continuing planning process. Public notice and review of antidegradation will be coordinated with existing 401 certification notices for public review.*"

With regard to public participation and intergovernmental coordination, 40 C.F.R. § 131.12(a)(2) requires the following:

> *Where the quality of the waters exceeds levels necessary to support propagation of fish, shellfish and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the Department finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the Department's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.* (emphasis added)

Sections 58.01.02.052.06.d.ii and iii of IDEQ's water quality standards rule are consistent with EPA's Tier 2 regulation (40 C.F.R. § 131.12(a)(2)) and EPA's WQS Handbook (section 4.8.2) because they provide an opportunity for the public and any other governmental entities to comment on IDEQ's draft antidegradation analysis at an appropriate stage in the decision-making process (i.e., while changes can still be made). Therefore EPA approves sections 58.01.02.052.06.d.ii and iii of IDEQ's water quality standards rule as being consistent with CWA requirements as discussed above.

D. <u>Process for ensuring that the highest statutory and regulatory requirements for point sources are achieved and cost-effective and reasonable BMPs are achieved.</u>

Section 58.01.02.052.06.a of IDEQ's water quality standards rule provides:

> *Other Source Controls. In allowing any degradation of high water quality, the Department must assure that there shall be achieved in the watershed the highest statutory and regulatory requirements for all new and existing point sources and cost-effective and reasonable best management practices for all nonpoint source controls.*

This language reflects a requirement that is applicable when a lowering of water quality is being allowed, that appears in both IDEQ's and EPA's antidegradation policy for high quality water protection, at section 58.01.02.051.02 of IDEQ's water quality standards rule and 40 C.F.R. § 131.12(a)(1), respectively (note that EPA is not acting on the substantive language at section 58.01.02.051.02 as it is preexisting and unrevised). That requirement is:

> *Further, ["the Department"* in IDEQ's rule, *"the State"* in EPA's rule*] shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and cost-effective and reasonable best management practices for nonpoint source control.*

As explained in EPA's July 7, 1998 ANPRM (63 Fed. Reg. 36,784-85), EPA has interpreted this component of 40 C.F.R. 131.12(a)(1) as not requiring a State to establish best management practices (BMPs) for nonpoint sources where such BMP requirements do not exist: "State and Tribal antidegradation rules need only include provisions to assure achievement of BMPs that are required under State or Tribal nonpoint source control laws and regulations (see also Memorandum from Tudor T. Davies, Director EPA Office of Science and Technology to EPA Water Management Division Directors, Regions I-X, Subject: Interpretation of Federal Antidegradation Regulatory Requirement, February 22, 1994)".

Section 58.01.02.052.06.a of IDEQ's water quality standards rule also addresses implementation of the "other source controls" requirement as follows, "*In providing such assurance, the Department may enter together into an agreement with other State of Idaho or federal agencies in accordance with Sections 67-2326 through 67-2333, Idaho*

Code." Implementation of the "other source controls" provision is further addressed at Section 58.01.02.052.06.d.i of IDEQ's water quality standards rule, "*The Department in cooperation with State of Idaho designated management agencies and/or federal agencies will collect information regarding the other source controls specified in Subsection 052.08.a* (EPA understands that the cross-reference to .052.08 a is a typographical error and should reference 052.06.a)." IDEQ's methods, which contain these specific provisions aimed at ensuring that other source controls are identified and implemented, are consistent with 40 C.F.R. § 131.12(a)(2), as interpreted in EPA's July 7, 1998 ANPRM (63 Fed. Reg. 36,784-85). Related to the discussion above, the "other source controls" provision is further informed by the definition of two new terms: "Cost-Effective and Reasonable Best Management Practices (BMPS) for Nonpoint Sources" (section 58.01.02.010.16 of IDEQ's water quality standards rule) and "Highest Statutory and Regulatory Requirements for Point Sources" (section 58.01.02.010.45 of IDEQ's water quality standards rule). The definition for "Cost-Effective and Reasonable Best Management Practices (BMPs) for Nonpoint Sources" clarifies that the term applies to BMPs that have been specified as "approved" in rule. Where BMPs have not been specified for a particular activity, they are determined on a case-by-case basis. Limiting the application of BMPs to those that are required by IDEQ's regulations is consistent with EPA interpretation of 40 C.F.R. 131.12(a)(2) as explained above.

The term "Highest Statutory and Regulatory Requirements for Point Sources" is defined as follows: "*All applicable effluent limits required by the Clean Water Act and other permit conditions. It also includes any compliance schedules or consent orders requiring measures to achieve applicable effluent limits and other permit conditions required by the Clean Water Act.*" Hence, when determining that the highest statutory and regulatory requirements for point sources are achieved, IDEQ will include all applicable effluent limits and other permit conditions that are currently being met, and legal mechanisms that have been imposed to bring activities into compliance with such conditions (i.e., consent orders and/or compliance schedules). EPA believes this is consistent with the intent of the provision at 40 C.F.R. § 131.12(a)(2) that "there shall be achieved," i.e., IDEQ will ensure that either the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control are being achieved or ensure that they "shall be achieved" through consent orders and compliance schedules.

For the reasons discussed above, EPA approves sections 58.01.02.052.06.a, and 58.01.02.052.06.d.i of IDEQ's water quality standards rule as being consistent with 40 C.F.R. § 131.12(a)(2). EPA is also approving the definitions of "Cost-Effective and Reasonable Best Management Practices (BMPs) for Nonpoint Sources" (section 58.01.02.010.16 of IDEQ's water quality standards rule) and "Highest Statutory and Regulatory Requirements for Point Sources" (section 58.01.02.010.45 of IDEQ's water quality standards rule) as providing useful information concerning implementation of section 58.01.02.052.06.a.

E. Recognition that in allowing any lowering of water quality under Tier 2, existing uses must be protected.

40 C.F.R. § 131.12(a)(2) requires that in allowing any lowering of water quality, the state must "*assure water quality adequate to protect existing uses fully.*" Idaho's antidegradation implementation methods ensure consistency with this requirement through implementation of section 58.01.02.052.05 of IDEQ's water quality standard rule which provides that "*Existing uses and the water quality necessary to protect the existing uses must always be maintained and protected.*" Section 58.01.02.052.05 is applicable to "*all new or reissued permits or licenses,*" as discussed above in Section II.A, and thus is applicable when Idaho applies its Tier 2 requirements to activities and discharges that would lower water quality. Section 58.01.02.052.05 is approved as being consistent with the existing use component of 40 C.F.R. § 131.12(a)(2), for the reasons discussed here.

F. Recognition that in allowing any lowering of water quality under Tier 2, water quality must be maintained at levels that meet the State's water quality criteria.

In addition to providing that "*Existing uses and the water quality necessary to protect the existing uses must always be maintained and protected,*" section 58.01.02.052.05 of IDEQ's water quality standards rule provides "*No degradation or lowering of water quality may be allowed that would cause or contribute to violation of water quality criteria.*" Independent of the antidegradation requirements of 40 C.F.R. § 131.12, states are to adopt designated uses consistent with the uses specified at section 101(a)(2) of the CWA, where attainable, and adopt water quality criteria that protect those designated uses (see 40 C.F.R. 131.10 and 131.11, respectively). Section 58.01.02.052.05 recognizes that any lowering of water quality in accordance with Idaho's antidegradation provisions must be consistent with meeting the State's water quality criteria, in addition to protecting existing uses. As discussed above, section 58.01.02.052.05 is applicable to "*all new or reissued permits or licenses,*" and thus is applicable when Idaho applies its Tier 2 requirements to activities and discharges that would lower water quality.

40 C.F.R. § 131.12(a)(2) only provides for lowering of water quality that exceeds levels necessary to support the propagation of fish, shellfish, and wildlife and recreation in and on the water (i.e., the uses specified at section 101(a)(2) of the CWA). It does not provide authority to lower water quality below criteria established to protect such uses. As discussed in EPA's WQS Handbook (section 4.5), in allowing any lowering of water quality in accordance with 40 C.F.R. § 131.12(a)(2), "*...water quality may not be lowered to less than the level necessary to fully protect the "fishable/swimmable" uses and other existing uses*" (the uses specified at section 101(a)(2) of the CWA are commonly referred to as "fishable/swimmable" uses). As discussed above, in accordance with 40 C.F.R. § 131.11, states are to adopt criteria to protect such uses where designated. Idaho's rules are consistent with these requirements.

For the reasons discussed here, section 58.01.02.052.05 of IDEQ's water quality standards rule is approved as being consistent with 40 C.F.R. § 131.12(a)(2).

V. Outstanding National Resource Water (ONRW) Protection ("Tier 3") Process

In IDEQ's April 15, 2011 submittal letter, IDEQ stated, in reference to the ORW provisions: "*The vast majority of this language is not new language, but rather existing language that was simply moved from other sections of the WQS to a new section in 052.*" (see Barry N. Burnell, IDEQ to Mike Bussell, EPA, April 15, 2011). In a cover note accompanying excerpts from the 2011 Idaho Administrative Code, Chapter 58.01.02, Water Quality Standards, IDEQ further explained, "*Please note that the language regarding Outstanding Resource Waters in previous section 055 was largely unchanged but was moved and is now incorporated into section 052 as subsection 07...Only the highlighted revised rule language and companion statutory language is being submitted for EPA review.*" (See IDEQ file: "*58-0102-1001 Sections 10, 051, & 052 from IDWQS_2011 with highlighted changes,*" included with IDEQ's April 15, 2011 submission to EPA).

As discussed above by the State of Idaho, the majority of the language in 58.01.02.052.07 is not new or revised language, but was previously existing language in effect under the CWA and was moved from previous section 58.01.02.055. Therefore EPA is not taking action on that language.

EPA is acting on the following revisions to Idaho's ONRW provision (referred to as "ORW" in Idaho): the introduction to the ORW provisions at section 58.01.02.052.07 of IDEQ's water quality standards rule (the title and the four sentences that were added prior to section 052.07.a); and a new provision addressing point source discharge restrictions for ORW's at section 58.01.02.052.07.g of IDEQ's water quality standards rule.

The four sentences that were added to the beginning of section 58.01.02.052.07 simply introduce the preexisting and unchanged process steps of IDEQ's water quality standards rule for identifying a water body as an ORW. The new introductory language of section 58.01.02.052.07 is:

> *Tier III – Outstanding Resource Waters (ORWs). ORWs are designated by the legislature. Subsection 052.07 describes the nomination, public notice and comment, public hearing, and board review process for directing the Department to develop legislation designating ORWs. Only the legislature may designate ORWs. Once designated by the legislature, the ORWs are listed in these rules.*
> (See Section 052.07 of Chapter 58.01.02 of the Idaho Administrative Code.)

EPA approves this new language in section 58.01.02.052.07 of IDEQ's water quality standards rule as providing a useful introduction to IDEQ's process for identifying a water body as an ORW. EPA believes it is useful for states to identify the process for adoption of ONRWs, but has not provided specificity for doing so in regulation or guidance.

In its July 7, 1998 ANPRM (63 Fed. Reg. 36,785-87) EPA explained: "Regarding the process for adoption of ONRWs, the existing regulation requires the State or Tribe to provide an ONRW level of protection in their antidegradation policies, but there is no requirement that any water body be so designated or any specificity as to how that is to

be done." EPA notes that preexisting and unrevised provisions of IDEQ's rule address the process and timing for identifying a water body as an ORW, including the process for public participation and for recommending waters to the legislature for ORW designation, and factors to be considered in deciding whether to recommend waters to the legislature for ORW designation. As discussed above, EPA is not acting on the preexisting and unrevised provisions of IDEQ's rule.

Section 58.01.02.052.07.g of IDEQ's water quality standards rule provides:

> *The water quality of ORWs shall be maintained and protected. Point source discharges that may cause degradation to ORWs may be allowed only if they are offset by reductions in other discharges per Subsection 052.04.c.*

EPA reads the language "*Point source discharges that may cause degradation to ORWs...*" as having broad applicability in that it covers any point sources that may degrade ORWs. This includes new or increased point source discharges to tributaries to an ORW that may cause degradation in the ORW. Subsection 58.01.02.052.04.c of IDEQ's rule addresses IDEQ's use of offsets and informs the use of that term at Section 58.01.02.052.07.g. Subsection 58.01.02.052.04.c provides:

> *In determining the effect of an activity or discharge on water quality of Tier II or Tier III waters, the Department may take into account reductions in pollution from other sources that are tied to the proposed activity or discharge. These offsets in pollution must be upstream of the degradation in water quality due to the proposed activity or discharge and occur before the activity or discharge is allowed to begin. The applicant seeking a permit or license for an activity or discharge based on offsets will be held responsible for assuring offsets are achieved and maintained as a condition of their permit or license.*

In its July 7, 1998 ANPRM (63 Fed. Reg. 36,785-87), EPA explained that it has interpreted the "water shall be maintained and protected" provision of 40 C.F.R. 131.12(a)(3) as requiring "no new or increased discharges to ONRWs and no new or increased discharge to tributaries to ONRWs that would result in lower water quality in the ONRWs," with the only exception being for short-term and temporary lowering of water quality. EPA goes on to explain, however, that it "has also allowed a proposed activity that will result in a new or expanded source where the applicant agrees to implement or finance upstream controls of point or nonpoint sources sufficient to offset the water quality effects of the proposed activity."

EPA approves section 58.01.02.052.07.g of IDEQ's water quality standards rule as being consistent with 40 C.F.R. § 131.12(a)(3) and EPA's interpretation in the ANPRM, discussed above, because it requires restrictions on point source discharges to ensure that the water quality of ORWs is maintained and protected. That is, section 58.01.02.052.07.g either prohibits point source discharges that may cause degradation to ORWs, or requires that any degradation that would be caused by a discharge be offset by

reductions in other discharges. EPA is also approving section 58.01.02.052.04.c as discussed earlier in this document at section II.B.5.

HB 153 revised section §39-3603(3)(c) of the Idaho Code by adding an "outstanding resource water" policy statement to the Idaho Code. It provides:

> *Outstanding resource waters -- Tier III protection. Where an outstanding resource water has been designated by the legislature that water quality shall be maintained and protected from the impacts of point and nonpoint source activities.*

This is consistent with the unrevised definition of "outstanding resource waters" in Idaho Code at §39-3602(20):

> *Outstanding resource water' means a high quality water, such as water of national and state parks and wildlife refuges and water of exceptional recreational or ecological significance, which has been so designated by the legislature. It constitutes an outstanding national or state resource that requires protection from point source and nonpoint source activities that may lower water quality.*

EPA is approving the new ORW policy statement at §39-3603(3)(c) of Idaho Code as consistent with the language in the federal ONRW provision at 40 C.F.R. § 131.12(a)(3), which provides: "Where high quality waters constitute an outstanding national resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected."

EPA is not acting on the preexisting and unrevised definitions of "outstanding resource water," "point source," and "nonpoint source activities" in Idaho statute and rule.

VI. Antidegradation Analysis For General Permits.

HB 153 (§39-3603(2)(a), Idaho Code) specifies that general permits shall undergo an antidegradation analysis at the time when the permits are certified, and it provides direction for cases where IDEQ finds that antidegradation is adequately addressed and for cases where IDEQ finds that antidegradation is not adequately addressed:

> *For general permits issued on or after July 1, 2011, the department will conduct an antidegradation review, including any required Tier II analysis, at the time at which general permits are certified. For general permits that the department determines adequately address antidegradation, review of individual applications for coverage will not be required unless it is required by the general permit. For general permits that the department determines do not adequately address antidegradation, the department may conclude that other conditions, such as the submittal of additional information or individual certification at the time an application is submitted for coverage under a general permit, may be necessary in the general permit to provide reasonable assurance of compliance with the antidegradation policy.*

In clarifying statements included with IDEQ's April 15, 2011 submission to EPA, IDEQ explained in part:

> *One of the options described in §39-3603(2)(a) is for DEQ to certify the general permit with conditions necessary to provide reasonable assurance of compliance with the antidegradation policy. This is consistent with §401 of the CWA. Under §401, a state may determine to grant, deny or waive certification. If the state provides a certification, it must include those conditions, if any, that are necessary to assure compliance with state WQS, including the antidegradation provisions in the WQS. 33 USCA 401(d); 40 C.F.R. § 124.53(e). Thus, under state and federal law, if DEQ determines the general permit does not contain provisions that assure compliance with the antidegradation policy, and DEQ determines to certify the permit, DEQ must include those conditions necessary to ensure compliance with the antidegradation provisions in the WQS.*
> (See IDEQ file: "*58-0102-1001 Clarification of antidegradation rule and HB 153.*)

Idaho's antidegradation methods for Tier 1, 2, and 3 are just as applicable to general permits as they are to individual permits and rely heavily on discharger and receiving water specific information. For example, the existing uses and the water quality necessary for their protection as identified in accordance with section 58.01.02.052.05 of IDEQ's water quality standards rule could be different for different receiving waters, and the determination of whether degradation could occur (and thus whether Tier 2 review is required) in accordance with section 58.01.02.052.04 of IDEQ's water quality standards rule is based on the calculated change in receiving water concentration as a result of the new or reissued permit or license taking into account appropriate mixing of the discharge with the receiving water. Documentation from IDEQ's rule making process provides insight as to factors IDEQ will use to determine if a general permit adequately addresses antidegradation given the inherent site-specific nature of an antidegradation review. Idaho code enables IDEQ to seek additional information to assess antidegradation at the time of application for coverage under a general permit if IDEQ determines that the general permit does not adequately address antidegradation. In its response to comments on its proposed rule, IDEQ said the following concerning general permits:

> *DEQ is unable to presume general permits will meet antidegradation requirements because DEQ does not know what types of activities will be covered under general permits, DEQ does not know what future permit conditions will be, and DEQ does not have permitting authority.*
> (See IDEQ's Response to Public Comments, IDEQ file: "*58-0102-1001 Antidegradation Proposed Rule, Response to Comments.pdf*, page 10.)

Furthermore, in a document prepared by IDEQ during its rule making process, to facilitate the discussion of applying antidegradation to general permits, IDEQ stated:

> *General permits are typically issued prior to knowing who will seek coverage, when facilities will seek coverage, how many facilities will seek coverage, and what the*

receiving water bodies will be. This presents challenges to analyzing their effect on water quality including antidegradation review because there is no site-specific information on which to base the review. Because of this, some individuals hold the opinion that antidegradation review should or must be conducted at the time at which each facility or activity seeks coverage under the general permit. On the flipside, it can be argued that conducting an antidegradation review at the time of general permit issuance is possible with certain assumptions and conditions, and necessary if general permits are to serve their purpose of streamlining the permitting process. For example, if stringent enough permit controls are in place, DEQ may be able to conclude there would be no lowering of water quality as long as the permit conditions are complied with.
(See Idaho Antidegradation Implementation Discussion Paper, Antidegradation Reviews for General Permits, July 15, 2010, page 2.)

EPA believes it is appropriate for IDEQ to determine whether a general permit adequately addresses Idaho's antdegradation provisions at the time of permit issuance and to reserve its right to require on a case-by-case basis additional information for an antidegradation review when an application for permit coverage is sought. Based on the information provided by IDEQ as discussed above, EPA concludes that IDEQ will be able to determine whether to conduct an antidegradation review at the time of application for coverage under a general permit utilizing factors such as: 1) whether there is adequate discharger and receiving water specific information available at the time of permit issuance to enable an antidegradation review consistent with the Tier 1, 2 and 3 provisions of Idaho's water quality standards regulation and statute and, 2) whether, in the absence of adequate discharger and receiving water specific information at the time of permit issuance, the proposed general permit conditions are stringent enough to categorically conclude that existing uses will be protected and a lowering of water quality will be prevented.

EPA approves §39-3603(2)(a), Idaho Code as being consistent with 40 C.F.R. § 131.12 because any general permit certified by IDEQ must adequately address Idaho's antidegradation provisions; and it is recognized that if antidegradation is not adequately addressed at the time of permit issuance, further antidegradation review may be necessary and required at the time an application is submitted for coverage under a general permit. IDEQ also recognizes its authority to deny certification if antidegradation is not adequately addressed in a general permit.

The full text of section 39-3603(2)(a), Idaho Code is as follows:

(a) General permits. For general permits issued on or after July 1, 2011, the department will conduct an antidegradation review, including any required Tier II analysis, at the time at which general permits are certified. For general permits that the department determines adequately address antidegradation, review of individual applications for coverage will not be required unless it is required by the general permit. For general permits that the department determines do not adequately address antidegradation, the department may conclude that other conditions, such as

the submittal of additional information or individual certification at the time an application is submitted for coverage under a general permit, may be necessary in the general permit to provide reasonable assurance of compliance with the antidegradation policy. If supported by the permit record, the department may also presume that discharges authorized under a general permit are insignificant or that the pollution controls required in the general permit are the least degrading alternative as specified in the department's rules.

§39-3602(14) of the Idaho Code as revised in HB 153 defines "general permit" as:

...an NPDES permit issued by the U.S. environmental protection agency authorizing a category of discharges under the federal clean water act or a nationwide or regional permit issued by the U.S. army corps of engineers under the federal clean water act.

EPA is also approving the definition at §39-3602(14), Idaho Code as providing useful information concerning implementation of §39-3603(2)(a), Idaho Code.

VII. Additional Revisions

A. Titles for the various tiers of antidegradation (Antidegradation Policy, Section 58.01.02.051 of IDEQ's Water Quality Standards Rule and Section 39-3603(1) of the Idaho Code)

The antidegradation policy in chapter 58.01.02 of IDEQ's water quality standards rule was revised to include the additional titles of "*Tier I*," *Tier II*," and "*Tier III*" at section 051.01 "Maintenance of Existing Uses for All Waters," section 051.02 "High Quality Waters," and section 051.03 "Outstanding Resource Waters," respectively. Similarly, HB 153 revised the antidegradation policy in Idaho statute to include the titles "*Maintenance of existing uses for all waters – Tier I protection*" and "*High quality waters – Tier II protection*," at §39-3603(1)(a) of the Idaho Code, which addresses existing use protection, and §39-3603(1)(a) of the Idaho Code, which addresses high quality water protection, respectively. EPA approves these formatting revisions as ensuring continuity of terms as they are used in Idaho's water quality rule and statute when referring to the various tiers of antidegradation.

B. "Thermal discharges" (Section 58.01.02.051.04 of IDEQ's Water Quality Standards Rule)

IDEQ added a policy statement addressing thermal discharges and antidegradation to the antidegradation policy section of its water quality standards rule at section 58.01.02.051.04. It provides:

Thermal Discharges. In those cases where potential water quality impairment associated with a thermal discharge is involved, antidegradation shall be implemented consistent with Section 316 of the Clean Water Act.

IDEQ's policy statement concerning thermal discharges and antidegradation is substantively identical to 40 C.F.R. § 131.12(a)(4), which provides:

> *In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with Section 316 of the Clean Water Act.*

Therefore, EPA approves section 58.01.02.051.04 of IDEQ's water quality standards rule as being consistent with 40 C.F.R. § 131.12(a)(4).

C. "Restoration Projects" (Section 58.01.02.052.02 of IDEQ's Rule)

IDEQ's water quality standards rule contains a provision at section 58.01.02.052.02, regarding "Restoration Projects." This provision would allow a lowering of water quality for restoration projects to occur be it for Tier 1, 2 or 3. It provides:

> *Changes in water quality may be allowed by the Department without an antidegradation review where determined necessary to secure long-term water quality improvement through restoration projects designed to trend toward natural characteristics and associated uses to a water body where those characteristics and uses have been lost or diminished. Restoration projects shall implement best management practices."*

EPA interprets "changes in water quality," combined with "to secure long term improvement," to mean that any lowering of water quality that may occur during restoration activities would be temporary with a net result being improvement in water quality (not lowering). This is supported by IDEQ's response to comments on the proposed rule:

> *DEQ does not believe any traditionally regulated discharge can legitimately claim restoration as their purpose. In addition, restoration projects are those intended to secure long-term water quality improvements, and thus by definition will not result in long term or permanent degradation.*
> (see IDEQ's Response to Public Comments, IDEQ file: "*58-0102-1001 Antidegradation Proposed Rule, Response to Comments.pdf*, page 45.)

EPA recognizes the ability for a state to allow "temporary" and "short term" degradation in the course of ensuring that the water quality of ONRWs (i.e., Tier 3, the most stringent level of water quality protection in the federal antidegradation policy), is maintained and protected (see 63 Fed. Reg. 36,785-87 and EPA's WQS Handbook, section 4.7). In the preamble to the 1983 water quality standards regulation (48 Fed. Reg. 51,400; 51,403 (November 8, 1983)), EPA explained that section 131.12(a)(3) was revised to provide a limited exception to the "absolute 'no degradation'" requirement, to allow some limited activities which result in temporary and short term changes in water quality, because EPA

was concerned that waters were not being designated as ONRWs due to the "flat no degradation" provision.

EPA believes that it is reasonable to apply a similar rationale to exempt from Tier 2 review temporary degradation associated with restoration projects because Tier 2 is a less stringent level of water quality protection than Tier 3. Idaho's exemption applies for potential temporary degradation, which is interim to securing long term restoration of water quality and is, therefore, consistent with both the federal antidegradation policy at 40 C.F.R. § 131.12(a)(2) and the CWA objective at §101(a) to "...restore and maintain...the Nation's waters." The substantive Tier 2 review requirements of 40 C.F.R. § 131.12(a)(2) apply if the State is allowing lower water quality. Here the activity would ultimately result in higher water quality. Furthermore, section 58.01.02.052.02 of IDEQ's water quality standards rule requires implementation to reduce temporary lowering of water quality during restoration projects, i.e., "*Restoration projects shall implement best management practices.*"

In the context of implementing the federal ONRW provision, EPA has generally defined "temporary" and "short term" degradation in terms of "weeks and months, not years" (see 63 Fed. Reg. 36,785-87 and EPA's WQS Handbook, section 4.7). Those time frames were established, however, in the context of a tier of antidegradation (Tier 3) which provides no mechanism for approving a lowering of water quality, rather than for Tier 2, where long-term and potentially permanent degradation can be allowed if justified as being "necessary" in accordance with 40 C.F.R. § 131.12(a)(2). Furthermore, the time frames discussed in the ANPRM and WQS Handbook associated with the ONRW regulation were not established with restoration of water quality in mind, be it restoration in either Tier 2 or Tier 3 waters. Idaho's restoration exemption is fully consistent with the overarching CWA goals to "restore and maintain" the Nation's waters. Finally, EPA's discussion of "temporary" and "short term" in the WSQ Handbook includes the following statement that implies some flexibility concerning the duration of temporary degradation:

> *It is difficult to give an exact definition of "temporary" and "short term" because of the variety of activities that might be considered. However, in rather broad terms, EPA's view of temporary is weeks and months, not years. The intent of EPA's provision clearly is to limit water quality degradation to the shortest possible time. If a construction activity is involved, for example, temporary is defined as the length of time necessary to construct the facility and make it operational.*
> (See Water Quality Standards Handbook: Second Edition, EPA-823-B-94-005a, August 1994, section 4-7.)

To the extent that Idaho's restoration project provision may allow temporary degradation with a duration longer than "weeks and months," it is important to recognize that section 58.01.02.052.02 is specific to antidegradation and does not authorize exceedances of water quality criteria established to protect designated uses. Moreover, as stated above, section 58.01.02.052.02 requires implementation of best management practices. EPA believes it is reasonable to expect that implementation of best management practices

would seek to minimize both the magnitude and the duration of temporary degradation. Finally, and most importantly, the ultimate intent of the project is that any degradation would be reversed and water quality would be improved to better than pre-project conditions.

EPA believes that the intent of section 58.01.02.052.02 to restore uses back to, or at least closer to, natural, i.e., "*...restoration projects designed to trend toward natural characteristics and associated uses to a water body where those characteristics and uses have been lost or diminished,*" is consistent with the CWA 101(a) objectives and is complementary to, and consistent with, the underlying intent of existing use protection at 40 C.F.R. § 131.12(a)(1).

For the above reasons, EPA also believes section 58.01.02.052.02 is consistent with ONRW protection at 40 C.F.R. § 131.12(a)(3). As discussed in EPA's WQS Handbook, section 4.7, ONRWs are intended to include the highest quality waters of the United States. Such waters often have characteristics that are essentially representative of natural conditions. Section 58.01.02.052.02 of IDEQ's water quality standards regulation is applicable to projects that are intended to restore a water's natural characteristics.

EPA believes that activities that are proposed for the express purpose of securing water quality improvement where degradation has previously occurred are distinguishable from traditionally regulated discharges that by their nature are intended to dispose of pollutants and would cause water quality degradation that is ongoing without any intent to improve water quality. The antidegradation provisions of 40 C.F.R. § 131.12 are intended to address the latter, that is to prevent or limit degradation of water quality from such traditionally regulated discharges, and are not intended to impede efforts to restore water quality and uses towards their natural characteristics. In a letter of September 5, 2008, explaining that 40 C.F.R. § 131.10(g) is not intended to apply to situations where removal of an existing use would facilitate attainment of a use closer to those supported by a water's natural or "minimally impacted conditions," EPA stated : "The intent of the regulation is to further the objective of the CWA 'to restore and maintain the chemical, physical, and biological integrity' of the nations waters (CWA section 101(a)), not to prevent actions that make the waterbody more like its minimally impacted condition." (see Denise Keehner, Director EPA's Standards and Health Protection Division to Derek Smithee, Oklahoma Water Resources Board, September 5, 2008). As cited above, DEQ has stated that it does not believe that traditionally regulated discharge can legitimately claim restoration as their purpose. Therefore, for the reasons discussed above, EPA approves section 58.01.02.052.02 of IDEQ's water quality standards rule as being consistent with the objective of the CWA at section 101(a) and complementary to, and consistent with, the purpose of 40 C.F.R. § 131.12.

D. "Waters or water body" definition (§39-3602(33), Idaho Code)

HB 153 revised the definition of "waters or water body" at §39-3602(33), Idaho Code as follows:

Waters or water body" means ~~all the accumulations of surface water, natural and artificial, public and private, or parts thereof which are wholly or partially within, flow through or border upon this state~~ the navigable waters of the United States as defined in the federal clean water act. For the purposes of this chapter, water bodies shall not include municipal or industrial wastewater treatment or storage structures or private reservoirs, the operation of which has no effect on waters ~~of the state~~.

EPA approves the revisions to this definition at §39-3602(33), Idaho Code as being consistent with the CWA definition of navigable waters. Water quality standards under the CWA, including an antidegradation policy established in accordance with 40 C.F.R. § 131.12, are to apply to "navigable waters" as defined in the CWA. "Navigable waters" as defined at §502(7) of the CWA means "the waters of the United States, including the territorial seas." EPA is only acting on the revisions, i.e., added and deleted language as shown above. EPA is not acting on unchanged previously existing language.

F. "Assigned Criteria" definition (§58.01.02.010.05 of the Idaho Administrative Code)

IDEQ added a definition of "assigned criteria" at section 58.01.02.010.05 of the Idaho Administrative Code as follows:

Assigned Criteria. Criteria associated with beneficial uses from Section 100 of these rules.

In its response to comments IDEQ explained that "*assigned criteria means the criteria in Sections 200 through 253 of the water quality standards that are associated with the beneficial uses.*" (IDEQ's Response to Public Comments, IDEQ file: "*58-0102-1001 Antidegradation Proposed Rule, Response to Comments.pdf*, page 11). Section 58.01.02.100 of IDEQ's water quality standards rule contains a list of the designated "beneficial uses" that are applicable to Idaho's surface waters, wherever attainable, and thus "assigned criteria" refers to the criteria adopted to protect those designated uses. Those designated uses include uses consistent with the propagation of fish, shellfish, and wildlife and recreation in and on the water (i.e., the uses specified at section 101(a)(2) of the CWA). "Assigned criteria" is used at section 58.01.02.052.06 of IDEQ's water quality standards rule as follows: "*The Department may allow significant degradation of surface water quality that is better than assigned criteria only if it is determined to be necessary to accommodate important economic or social development in the area in which the waters are located.*" EPA approves the definition of "assigned criteria" at section 58.01.02.010.05 of IDEQ's water quality standards rule as providing useful information concerning the implementation of section 58.01.02.052.06. Section 58.01.02.052.06 of IDEQ's water quality standards rule is approved as discussed earlier in this document at section II.B.1.