

1 **R317-2-3. Antidegradation Policy.**

2 3.1 Maintenance of Water Quality

3 Waters whose existing quality is better than the established standards for the designated uses  
4 will be maintained at high quality unless it is determined by the Board, after appropriate  
5 intergovernmental coordination and public participation in concert with the Utah continuing  
6 planning process, allowing lower water quality is necessary to accommodate important economic  
7 or social development in the area in which the waters are located. However, existing instream  
8 water uses shall be maintained and protected. No water quality degradation is allowable which  
9 would interfere with or become injurious to existing instream water uses.

10 In those cases where potential water quality impairment associated with a thermal discharge is  
11 involved, the antidegradation policy and implementing method shall be consistent with Section  
12 316 of the Federal Clean Water Act.

13 3.2 Category 1 Waters

14 Waters which have been determined by the Board to be of exceptional recreational or ecological  
15 significance or have been determined to be a State or National resource requiring protection, shall  
16 be maintained at existing high quality through designation, by the Board after public hearing, as  
17 Category 1 Waters. New point source discharges of wastewater, treated or otherwise, are prohibited  
18 in such segments after the effective date of designation. Protection of such segments from  
19 pathogens in diffuse, underground sources is covered in R317-5 and R317-7 and the Regulations  
20 for Individual Wastewater Disposal Systems (R317-501 through R317-515). Other diffuse sources  
21 (nonpoint sources) of wastes shall be controlled to the extent feasible through implementation of  
22 best management practices or regulatory programs.

23 Discharges may be allowed where pollution will be temporary and limited after consideration of  
24 the factors in R317-2-3.5.b.4., and where best management practices will be employed to minimize  
25 pollution effects.

26 Waters of the state designated as Category 1 Waters are listed in R317-2-12.1.

27 3.3 Category 2 Waters

28 Category 2 Waters are designated surface water segments which are treated as Category 1 Waters  
29 except that a point source discharge may be permitted provided that the discharge does not  
30 degrade existing water quality. Discharges may be allowed where pollution will be temporary and  
31 limited after consideration of the factors in R317-2-3.5.b.4., and where best management  
32 practices will be employed to minimize pollution effects. Waters of the state designated as Category  
33 2 Waters are listed in R317-2-12.2.

34 3.4 Category 3 Waters

35 For all other waters of the state, point source discharges are allowed and degradation may occur,  
36 pursuant to the conditions and review procedures outlined in Section 3.5.

37 3.5 Antidegradation Review (ADR)

38 An antidegradation review will determine whether the proposed activity complies with the  
39 applicable antidegradation requirements for receiving waters that may be affected.

40 An antidegradation review (ADR) may consist of two parts or levels. A Level I review is  
41 conducted to insure that existing uses will be maintained and protected.

42 Both Level I and Level II reviews will be conducted on a parameter-by-parameter basis. A  
43 decision to move to a Level II review for one parameter does not require a Level II review for other  
44 parameters. Discussion of parameters of concern is those expected to be affected by the proposed  
45 activity.

46 Antidegradation reviews shall include opportunities for public participation, as described in  
47 Section 3.5e.

48 a. Activities Subject to Antidegradation Review (ADR)

49 1. For all State waters, antidegradation reviews will be conducted for proposed federally  
50 regulated activities, such as those under Clean Water Act Sections 401 (FERC and other Federal  
51 actions), 402 (UPDES permits), and 404 (Army Corps of Engineers permits). The Executive  
52 Secretary may conduct an ADR on any projects with the potential for major impact on the quality  
53 of waters of the state. The review will determine whether the proposed activity complies with the  
54 applicable antidegradation requirements for the particular receiving waters that may be affected.

55 2. For Category 1 Waters and Category 2 Waters, reviews shall be consistent with the  
56 requirement established in Sections 3.2 and 3.3, respectively.

57 3. For Category 3 Waters, reviews shall be consistent with the requirements established in this  
58 section

59 b. An Anti-degradation Level II review is not required where any of the following conditions  
60 apply:

61 1. Water quality will not be lowered by the proposed activity or for existing permitted facilities,  
62 water quality will not be further lowered by the proposed activity, examples include situations  
63 where:

64 (a) the proposed concentration-based effluent limit is less than or equal to the ambient  
65 concentration in the receiving water during critical conditions; or

66 (b) a UPDES permit is being renewed and the proposed effluent concentration and loading limits  
67 are equal to or less than the concentration and loading limits in the previous permit; or

68 (c) a UPDES permit is being renewed and new effluent limits are to be added to the permit, but  
69 the new effluent limits are based on maintaining or improving upon effluent concentrations and  
70 loads that have been observed, including variability; or

71 2. Assimilative capacity (based upon concentration) is not available or has previously been  
72 allocated, as indicated by water quality monitoring or modeling information. This includes  
73 situations where:

74 (a) the water body is included on the current 303(d) list for the parameter of concern; or

75 (b) existing water quality for the parameter of concern does not satisfy applicable numeric or  
76 narrative water quality criteria; or

77 (c) discharge limits are established in an approved TMDL that is consistent with the current  
78 water quality standards for the receiving water (i.e., where TMDLs are established, and changes in

79 effluent limits that are consistent with the existing load allocation would not trigger an  
80 antidegradation review).

81 Under conditions (a) or (b) the effluent limit in an UPDES permit may be equal to the water  
82 quality numeric criterion for the parameter of concern.

83 3. Water quality impacts will be temporary and related only to sediment or turbidity and fish  
84 spawning will not be impaired,

85 4. The water quality effects of the proposed activity are expected to be temporary and limited. As  
86 general guidance, CWA Section 402 general discharge permits, CWA Section 404 nationwide and  
87 general permits, or activities of short duration, will be deemed to have a temporary and limited  
88 effect on water quality where there is a reasonable factual basis to support such a conclusion. ~~The  
89 404 nationwide permits decision will be made at the time of permit issuance, as part of the  
90 Division's water quality certification under CWA Section 401. Where it is determined that the  
91 category of activities will result in temporary and limited effects, subsequent individual activities  
92 authorized under such permits will not be subject to further antidegradation review.~~ Factors to be  
93 considered in determining whether water quality effects will be temporary and limited may include  
94 the following:

- 95 (a) Length of time during which water quality will be lowered.
- 96 (b) Percent change in ambient concentrations of pollutants of concern
- 97 (c) Pollutants affected
- 98 (d) Likelihood for long-term water quality benefits to the segment (e.g., dredging of  
99 contaminated sediments)
- 100 (e) Potential for any residual long-term influences on existing uses.
- 101 (f) Impairment of the fish spawning, survival and development of aquatic fauna excluding fish  
102 removal efforts.

103 c. Anti-degradation Review Process

104 For all activities requiring a Level II review, the Division will notify affected agencies and the  
105 public with regards to the requested proposed activity and discussions with stakeholders may be  
106 held. In the case of Section 402 discharge permits, if it is determined that a discharge will be  
107 allowed, the Division of Water Quality will develop any needed UPDES permits for public notice  
108 following the normal permit issuance process.

109 The ADR will cover the following requirements or determinations:

- 110 1. Will all Statutory and regulatory requirements be met?

111 The Executive Secretary will review to determine that there will be achieved all statutory and  
112 regulatory requirements for all new and existing point sources and all required cost-effective and  
113 reasonable best management practices for nonpoint source control in the area of the discharge. If  
114 point sources exist in the area that have not achieved all statutory and regulatory requirements, the  
115 Executive Secretary will consider whether schedules of compliance or other plans have been  
116 established when evaluating whether compliance has been assured. Generally, the "area of the

**Comment [w1]:** Corps' nationwide permit is a subset of their general permit

**Comment [w2]:** Covered under proposed R317-15.

**Comment [WQM3]:** This section is organizationally a mess because it covers both Level I and Level II procedures, but does not distinguish which activities apply to Level I or Level II. Is this worth reorganizing, or address in guidance?

117 discharge" will be determined based on the parameters of concern associated with the proposed  
118 activity and the portion of the receiving water that would be affected.

119 2. Are there any reasonable less-degrading alternatives?

120 There will be an evaluation of whether there are any reasonable non-degrading or less degrading  
121 alternatives for the proposed activity. A treatment alternative will be considered reasonable to  
122 implement if it is both feasible and affordable. This question will be addressed by the Division  
123 based on information provided by the project proponent. Control alternatives for a proposed  
124 activity will be evaluated in an effort to avoid or minimize degradation of the receiving water.  
125 Alternatives to be considered, evaluated, and implemented to the extent feasible, could include  
126 pollutant trading, water conservation, water recycling and reuse, land application, total  
127 containment, etc.

128 For proposed UPDES permitted discharges, the following list of alternatives should be  
129 considered, evaluated and implemented to the extent feasible:

- 130 (a) innovative or alternative treatment options
- 131 (b) more effective treatment options or higher treatment levels
- 132 (c) connection to other wastewater treatment facilities
- 133 (d) process changes or product or raw material substitution
- 134 (e) seasonal or controlled discharge options to minimize discharging during critical water quality  
135 periods
- 136 (f) pollutant trading
- 137 (g) water conservation
- 138 (h) water recycle and reuse
- 139 (i) alternative discharge locations or alternative receiving waters
- 140 (j) land application
- 141 (k) total containment
- 142 (l) improved operation and maintenance of existing treatment systems
- 143 (m) other appropriate alternatives

144 ~~An option treatment alternative more costly than the "baseline treatment cheapest alternative"~~  
145 ~~may will have to be implemented if a substantial benefit to the stream can be realized it is less~~  
146 ~~degrading to the receiving water and is determined to be feasible and affordable. For private~~  
147 ~~developments, the determination of the affordability of a less degrading alternative will be based~~  
148 ~~on an evaluation of the effect on profitability, liquidity, solvency and leverage of the entity in~~  
149 ~~comparison to industry benchmarks. For public-sector developments, the determination of~~  
150 ~~affordability will be based on an evaluation of the cost per household of the less degrading~~  
151 ~~alternative in comparison to the median adjusted gross household income (MAGHI). In general,~~  
152 ~~an alternative will be considered not affordable if the projected per connection service fees would~~  
153 ~~be greater than 1.4% of MAGHI. Alternatives would generally be considered feasible where costs~~  
154 ~~are no more than 20% higher than the cost of the discharging alternative, and (for POTWs) where~~

**Comment [WQM4]:** Given the increase in complexity, it may make sense to consider breaking this up into several subsections. This would help—for instance—distinguish between more general considerations vs. those that vary between public vs. private.

We can address this later with the AGs office.

155 ~~the projected per connection service fees are not greater than 1.4% of MAGHI (median adjusted~~  
156 ~~gross household income), the current affordability criterion now being used by the Water Quality~~  
157 ~~Board in the wastewater revolving loan program. Alternatives within these cost ranges should be~~  
158 ~~carefully considered by the discharger. Other socioeconomic factors that will be considered for~~  
159 ~~public-sector discharges include debt indicators (such as bond rating and overall net debt),~~  
160 ~~socioeconomic indicators (such as unemployment rate), and financial management indicators~~  
161 ~~(such as property tax revenue and property tax collection rate). Where State financing is~~  
162 ~~appropriate, a financial assistance package may be influenced by this evaluation, i.e., a less~~  
163 ~~polluting alternative may receive a more favorable funding arrangement in order to make it a more~~  
164 ~~financially attractive alternative.~~

165 ~~Other non-cost factors that will be considered in the determination of the feasibility of an~~  
166 ~~alternative include potential engineering, environmental, and right-of-way complications that vary~~  
167 ~~among alternatives.~~

168 It must also be recognized in relationship to evaluating options that would avoid or reduce  
169 discharges to the stream, that in some situations it may be more beneficial to leave the water in the  
170 stream for instream flow purposes than to remove the discharge to the stream.

### 171 3. Special Procedures for 404 Permits.

172 ~~For 404 permitted activities, all appropriate alternatives to avoid and minimize degradation~~  
173 ~~should be evaluated. Activities involving a discharge of dredged or fill materials that are considered~~  
174 ~~to have more than minor adverse effects on the aquatic environment are regulated by individual~~  
175 ~~CWA Section 404 permits. The decision-making process relative to the 404 permitting program is~~  
176 ~~contained in the 404(b)(1) guidelines (40 CFR Part 230). Prior to issuing a permit under the~~  
177 ~~404(b)(1) guidelines, the Corps of Engineers:~~

178 ~~(a) makes a determination that the proposed activity discharges are unavoidable (i.e., necessary);~~

179 ~~(b) examines alternatives to the proposed activity and authorize only the least damaging~~  
180 ~~practicable alternative; and~~

181 ~~(c) requires mitigation for all impacts associated with the activity. A 404(b)(1) finding document~~  
182 ~~is produced as a result of this procedure and is the basis for the permit decision. Public~~  
183 ~~participation is provided for in the process.~~

184 ~~Because the 404(b)(1) guidelines contains an alternatives analysis, the executive secretary will~~  
185 ~~not require development of a separate alternatives analysis for the anti-degradation review.~~  
186 ~~Additional analysis of treatment alternatives may be required of the applicant to demonstrate the~~  
187 ~~selection of the least degrading, reasonable treatment alternative to prevent or minimize the~~  
188 ~~discharge and maintain the chemical, physical, and biological integrity of the State's waters. The~~  
189 ~~division will use the analysis in the 404(b)(1) finding document in completing its anti-degradation~~  
190 ~~review and 401 certification.~~

### 191 4. Does the proposed activity have economic and social importance?

192 Although it is recognized that any activity resulting in a discharge to surface waters will have  
193 positive and negative aspects, information must be submitted by the applicant that any discharge  
194 or increased discharge will be of economic or social importance in the area.

195 The factors addressed in such a demonstration may include, but are not limited to, the following:

**Comment [w5]:** for federally funded or permitted projects.

**Comment [WQM6]:** The alternatives analysis for the EIS may not always have the specificity required for the antidegradation review and determination of least degrading, reasonable alternative.

- 196 (a) employment (i.e., increasing, maintaining, or avoiding a reduction in employment);  
197 (b) increased production;  
198 (c) improved community tax base;  
199 (d) housing;  
200 (e) correction of an environmental or public health problem; and  
201 (f) other information that may be necessary to determine the social and economic importance of  
202 the proposed surface water discharge.

203 5. The applicant may submit a proposal to mitigate any adverse environmental effects of the  
204 proposed activity (e.g., instream habitat improvement, bank stabilization). Such mitigation plans  
205 should describe the proposed mitigation measures and the costs of such mitigation. Mitigation  
206 plans will not have any effect on effluent limits or conditions included in a permit (except possibly  
207 where a previously completed mitigation project has resulted in an improvement in background  
208 water quality that affects a water quality-based limit). Such mitigation plans will be developed and  
209 implemented by the applicant as a means to further minimize the environmental effects of the  
210 proposed activity and to increase its socio-economic importance. An effective mitigation plan may,  
211 in some cases, allow the Executive Secretary to authorize proposed activities that would otherwise  
212 not be authorized.

213 6. Will water quality standards be violated by the discharge?

214 Proposed activities that will affect the quality of waters of the state will be allowed only where the  
215 proposed activity will not violate water quality standards.

216 7. Will existing uses be maintained and protected?

217 Proposed activities can only be allowed if "existing uses" will be maintained and protected. No  
218 UPDES permit will be allowed which will permit numeric water quality standards to be exceeded in  
219 a receiving water outside the mixing zone. In the case of nonpoint pollution sources, the non-  
220 regulatory Section 319 program now in place will address these sources through application of best  
221 management practices to ensure that numeric water quality standards are not exceeded.

222 ~~8.~~ If a situation is found where there is an existing use which is a higher use (i.e., more stringent  
223 protection requirements) than that current designated use, the Division will apply the water quality  
224 standards and anti-degradation policy to protect the existing use. Narrative criteria may be used as  
225 a basis to protect existing uses for parameters where numeric criteria have not been adopted.  
226 Procedures to change the stream use designation to recognize the existing use as the designated  
227 use would be initiated.

228 d. Special Procedures for Drinking Water Sources

229 An Antidegradation Level II Review will be required by the Executive Secretary for discharges to  
230 waters with a Class 1C drinking water use assigned.

231 Depending upon the locations of the discharge and its proximity to downstream drinking water  
232 diversions, additional treatment or more stringent effluent limits or additional monitoring, beyond  
233 that which may otherwise be required to meet minimum technology standards or in stream water  
234 quality standards, may be required by the Executive Secretary in order to adequately protect public

235 health and the environment. Such additional treatment may include additional disinfection,  
236 suspended solids removal to make the disinfection process more effective, removal of any specific  
237 contaminants for which drinking water maximum contaminant levels (MCLs) exists, and/or  
238 nutrient removal to reduce the organic content of raw water used as a source for domestic water  
239 systems.

240 Additional monitoring may include analyses for viruses, Giardia, Cryptosporidium, other  
241 pathogenic organisms, and/or any contaminant for which drinking water MCLs exist. Depending  
242 on the results of such monitoring, more stringent treatment may then be required.

243 The additional treatment/effluent limits/monitoring which may be required will be determined  
244 by the Executive Secretary after consultation with the Division of Drinking Water and the  
245 downstream drinking water users.

246 e. Public Notice

247 The public will be provided notice and an opportunity to comment on the conclusions of all  
248 completed antidegradation reviews. Where possible, public notice on the antidegradation review  
249 conclusions will be combined with the public notice on the proposed permitting **and certifying**  
250 action. In the case of UPDES permits, public notice will be provided through the normal permitting  
251 process, as all draft permits are public noticed for 30 days, and public comment solicited, before  
252 being issued as a final permit. The Statement of Basis for the draft UPDES permit will contain  
253 information on how the ADR was addressed including results of the Level I and Level II reviews. In  
254 the case of Section 404 permits from the Corps of Engineers, the Division of Water Quality will  
255 develop any needed 401 Certifications and the public notice **may will** be published in conjunction  
256 with the US Corps of Engineers public notice procedures. Other permits requiring a Level II review  
257 will receive a separate public notice according to the normal State public notice procedures.

258 f. Implementation Procedures

259 The Executive Secretary shall establish reasonable protocols and guidelines (1) for completing  
260 technical, social, and economic need demonstrations, (2) for review and determination of adequacy  
261 of Level II ADRs and (3) for determination of additional treatment requirements. Protocols and  
262 guidelines will consider federal guidance and will include input from local governments, the  
263 regulated community, and the general public. ~~The Executive Secretary will inform the Water  
264 Quality Board of any protocols or guidelines that are developed.~~

**Comment [w7]:** Corresponds with R317-15. We may consider just adding this language ... and the public notice will be consistent with the requirements in R317-15.

266 | R317-1-1. Definitions.  
267 | Baseline Treatment Alternative: Treatment alternative necessary to meet permit limits and  
268 | water quality standards in the receiving water as determined by the wasteload analysis and Level I  
269 | ADR.  
270

