

Utah Antidegradation Review Implementation Guidance

DRAFT for COMMENT

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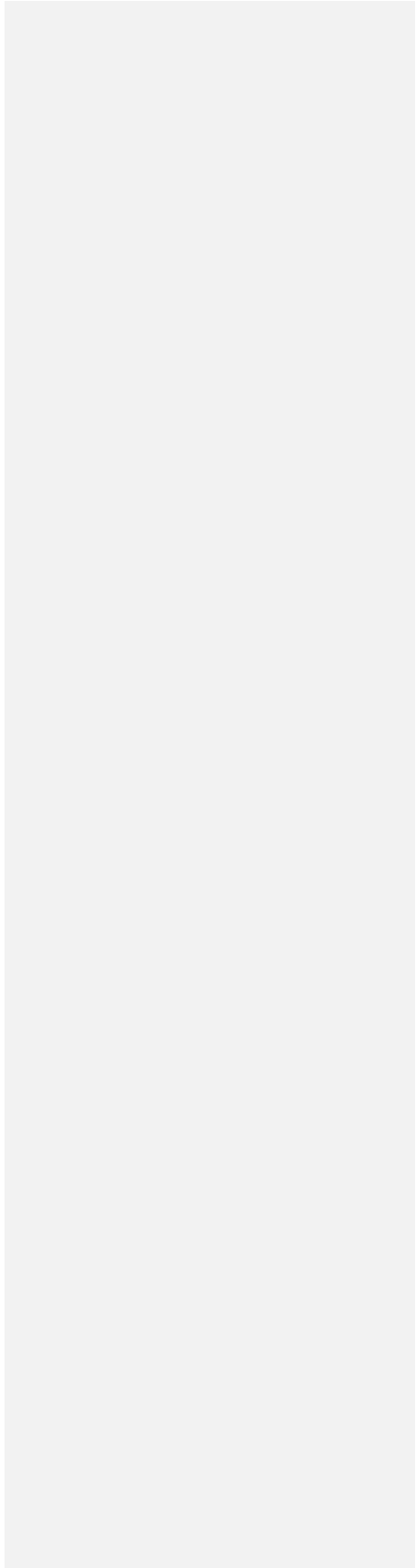
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1 **1.0 INTRODUCTION**

2 The central goals of the Clean Water Act and the Utah Water Quality Act are to
3 protect, maintain, and restore the quality of Utah’s waters. One way in which this is
4 accomplished is through Utah’s water quality standards, which consist of: 1) designated
5 uses (e.g., aquatic life, drinking water, recreation), 2) water quality criteria (both
6 numeric and narrative), and 3) antidegradation policy and procedures. The intent of the
7 antidegradation component of our standards is to protect existing uses and to maintain
8 high quality waters. Our water quality criteria create a floor below which uses become
9 impaired, whereas our antidegradation policy protects water quality in waters where
10 the quality is already better than the criteria.

11 Utah’s antidegradation policy (UAC R317-2-3) does not prohibit degradation of water
12 quality, unless the Water Quality Board has previously considered the water to be of
13 exceptional recreational or ecological significance (Category 1 or Category 2 waters).
14 Instead the policy creates a series of rules that together ensure that when degradation
15 of water quality is necessary for social and economic development, every feasible option
16 to minimize degradation is explored. Also, the policy requires that alternative
17 management options and the environmental and socioeconomic benefits of proposed
18 projects are made available to concerned stakeholders.

19 This document provides the implementation procedures for Utah’s antidegradation
20 rules. Utah’s Division of Water Quality (hereafter DWQ) is required by Federal Code (40
21 CFR §131.12(a)) to develop an antidegradation policy and implementation procedures.
22 These procedures and associated rules (UAC R317-2-3) meet these requirements. The
23 implementation procedures discussed in this document were developed in a
24 collaborative process among stakeholders to identify procedures that would meet the
25 intent of antidegradation rules, while avoiding unnecessary regulatory burdens.

26 This first draft of implementation procedures focuses on Utah Pollution Discharge
27 Elimination System (UPDES) permits except for general permits. General permits must
28 meet ADR requirements and implementation procedures for general permits will be
29 forthcoming in future drafts of this guidance. Section 7.0 summarizes the portions of
30 the guidance that are incomplete. The absence of guidance for these topics does not
31 negate or delay the requirements for antidegradation reviews required under UAC
32 R317-2-3.

33 **2.0 THE ANTIDEGRADATION PROCESS**

34 Antidegradation reviews (ADRs) are required, as part of the permitting process, for
35 any action that has the potential to degrade water quality. Activities subject to ADRs
36 include any activities that require a permit or water quality certification pursuant to
37 federal law. The ADR process involves: 1) classification of surface waters into protection
38 categories, and 2) documenting that activities likely to degrade water quality are
39 necessary and that all State and Federal procedures have been followed to ensure that
40 reasonable steps are taken to minimize degradation.

41 The overarching goal of ADRs is summarized in rule R317.2.3.1 as follows:

42 *“Waters whose existing quality is better than the established standards for the designated*
43 *uses will be maintained at high quality unless it is determined by the Board, after*
44 *appropriate intergovernmental coordination and public participation in concert with the*
45 *Utah continuing planning process, allowing lower water quality is necessary to*
46 *accommodate important economic or social development in the area in which the waters are*
47 *located. However, existing instream water uses shall be maintained and protected. No water*
48 *quality degradation is allowable which would interfere with or become injurious to existing*
49 *instream water uses.”*

50 **2.1 Assigning Protection Categories**

51 Utah’s surface waters are assigned to one of three protection categories that
52 prescribe generally permissible water quality actions. These levels of protection are
53 determined by their existing biological, chemical and physical integrity, and by the
54 interest of stakeholders in protecting current conditions. Antidegradation procedures
55 are differentially applied to each of these protection categories on a parameter-by-
56 parameter basis.

57 **2.1.1 Category 1 Waters**

58 Category 1 waters (as listed in R317-2-12.1) are afforded the highest level of
59 protection from activities that are likely to degrade water quality. This category is
60 reserved for waters of exceptional recreation or ecological significance, or that have
61 other qualities that warrant exceptional protection. Once a waterbody is assigned
62 Category 1 protection, future discharges of wastewater into these waters are not
63 permitted. However, permits may be granted for other activities (e.g., road
64 construction, dam maintenance) if it can be shown that water quality effects will be
65 temporary and that all appropriate Best Management Practices (BMPs) have been
66 implemented to minimize degradation of these waters.

67 **2.1.2 Category 2 Waters**

68 Category 2 waters (as listed in R317-2-12.2) are also afforded a high level of
69 protection, but discharges to these waters are permissible, provided no degradation of
70 water quality will occur [or where pollution will result only during the actual construction](#)
71 [activity, and where best management practices will be employed to minimize pollution](#)
72 [effects](#). In practice, this means that all wastewater parameters should be at or below
73 background concentrations of the receiving water [for activities that are not temporary](#)
74 [and limited](#). As a result of this stipulation, the Level I and Level II ADR provisions
75 discussed in these implementation procedures are not required for Category 2 waters.

76 **2.1.3 Category 3 Waters**

77 All surface waters of the State are Category 3 waters unless otherwise designated as
78 Category 1 or 2 in UAC R317-2-12. Discharges that degrade water quality ~~for social and~~
79 ~~economically~~ are permitted for Category 3 waters provided that 1) existing uses are

80 protected, 2) the degradation is necessary, 3) the activity supports important social or
81 economic development in the area where the waters are located, and 4) all statutory
82 and regulatory requirements are met in the area of the discharge. Antidegradation
83 rules also apply for any proposed new or expanded discharge that is likely to degrade
84 water quality. ADRs require that these proposed actions demonstrate that such
85 proposed projects are necessary to accommodate social and economic development,
86 and that all reasonable alternatives to minimize degradation of water quality have been
87 explored. These implementation procedures provide details about how ADRs are
88 implemented to meet these requirements.

89 **2.2 Procedures for Assigning Protection Categories**

90 The intent of Category 1 and Category 2 protection classes is to protect high quality
91 waters. Any person or DWQ may nominate a surface water to be afforded Category 1 or
92 2 protections by submitting a request to the Executive Secretary of the Water Quality
93 Board. DWQ generally considers nominations during the triennial review of surface
94 water quality standards. The nominating party has the burden of establishing the basis
95 for reclassification of surface waters, although DWQ may assist, where feasible, with
96 data collection and compilation activities.

97 *2.2.1 Material to Include with a Nomination*

98 The nomination may include a map and description of the surface water; a statement
99 in support of the nomination, including specific reference to the applicable criteria for
100 unique water classification, and available, relevant and recent water quality or biological
101 data. All data should meet the minimum quality assurance requirements used by DWQ
102 for assessing waters of the State. A description of these requirements can be found in
103 the most recent *Integrated Report Part 1 Water Quality Assessment*.

104 *2.2.2 Considerations for Appropriate Data and Information to Include with* 105 *Nominations to Increase Protection of Surface Waters*

106 The Water Quality Board may reclassify a waterbody to a more protected category,
107 following appropriate public comment. Evidence provided to substantiate any of the
108 following justifications that a waterbody warrants greater protection may be used to
109 evaluate the request:

- 110 • The location of the surface water with respect to protections already afforded to
111 waters (e.g. on federal lands such as national parks or national wildlife refuges).
- 112 • The ecological value of the surface water (e.g., biological diversity, or the
113 presence of threatened, endangered, or endemic species)
- 114 • Water quality superior to other similar waters in surrounding locales.
- 115 • The surface water is of exceptional recreational or ecological significance
116 because of its unique attributes (e.g., Blue Ribbon Fishery)
- 117 • The surface water is highly aesthetic or important for recreation and tourism.

- 118 • The surface water has significant archeological, cultural, or scientific importance.
119 • The surface water provides a special educational opportunity.
120 • Any other factors the Executive Secretary considers relevant as demonstrating
121 the surface water's value as a resource.

122 The final reclassification decision will be based on all relevant information submitted
123 to or developed by DWQ.

124 *2.2.3 Considerations for Appropriate Data and Information for Consideration to* 125 *Decrease Protection of Surface Waters*

126 The intent of Category 1 and Category 2 protections is to prevent future degradation
127 of water quality. As a result, downgrades to surface water protection categories are
128 rare. However, exceptional circumstances may exist where downgrades may be
129 permitted to accommodate a particular project. For instance, in Utah most surface
130 waters in the upper portions of National Forests are afforded Category 1 protection,
131 which may not be appropriate in specific circumstances. Project proponents may
132 request a classification with lower protection; however, it is their responsibility to
133 provide sufficient justification. Examples of situations where a reclassification with less
134 stringent protections might be appropriate follow:

- 135 • Failure to complete the project will result in significant and widespread
136 economic harm.
137 • Situations where the surface water was improperly classified as a Category 1 or
138 Category 2 water because the surface water is not a high quality water (as
139 defined by the criteria outlined in 2.2.32).
140 • Water quality is more threatened by not permitting a discharge (e.g., septic
141 systems vs. centralized water treatment).

142 Requests for downgrades to protection should provide the most complete and
143 comprehensive rationale that is feasible. The request for a reduction in protection may
144 also be considered in concert with the alternatives evaluated through an accompanying
145 Level II ADR. Proposed projects affecting high quality waters may require more
146 comprehensive analysis than projects affecting lower quality waters.

147 *2.2.4 Public Comment Process for Proposed Reclassifications*

148 All data and information submitted in support of reclassification will be made part of
149 the public record. In addition to public comment, the DWQ will hold at least one public
150 meeting in the area near the nominated water. If the issues related to reclassification
151 are regional or statewide in nature or of broader public interest, the Division will
152 consider requests for public meetings in other locations. Comments received during this
153 meeting will be compiled and considered along with the information submitted with the
154 nomination ~~will be submitted to appropriate local planning agencies.~~

155 *2.2.5 Reclassification Decision Making Process*

156 The final reclassification decision will be based on all relevant information submitted
157 to or developed by the DWQ. All data will be presented and discussed with the Water
158 Quality Standards Workgroup. DWQ then submits its recommendations regarding
159 reclassifications to the Water Quality Board who makes a formal decision about
160 whether to proceed with rulemaking to reclassify the waterbody. The proposed
161 | reclassification is a rule change, and as such will trigger ~~normal~~ public notice and
162 comment procedures.

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163 **3.0 ANTIDegradation Review General Procedures**

164 **3.1 Overview of Antidegradation Review Procedures**

165 ADR reviews for Category 3 waters are conducted at two levels, which are referenced
166 in R317-2-3 as Level I and Level II reviews. Figure 1 provides an overview of the overall
167 ADR process.

168 Level I reviews are intended to ensure that proposed actions will not impair “existing
169 uses”. Level II ADRs assure that degradation is necessary and that the proposed activity
170 is economically and socially important. Level II ADRs are required for any activity that is
171 not temporary and limited in nature and is likely to result in degradation of water
172 quality. The central tenet of these reviews is to ensure that the discharge is necessary,
173 water quality standards will not be violated, and that alternatives to minimize
174 degradation are considered.

175 **3.2 Level I Antidegradation Reviews**

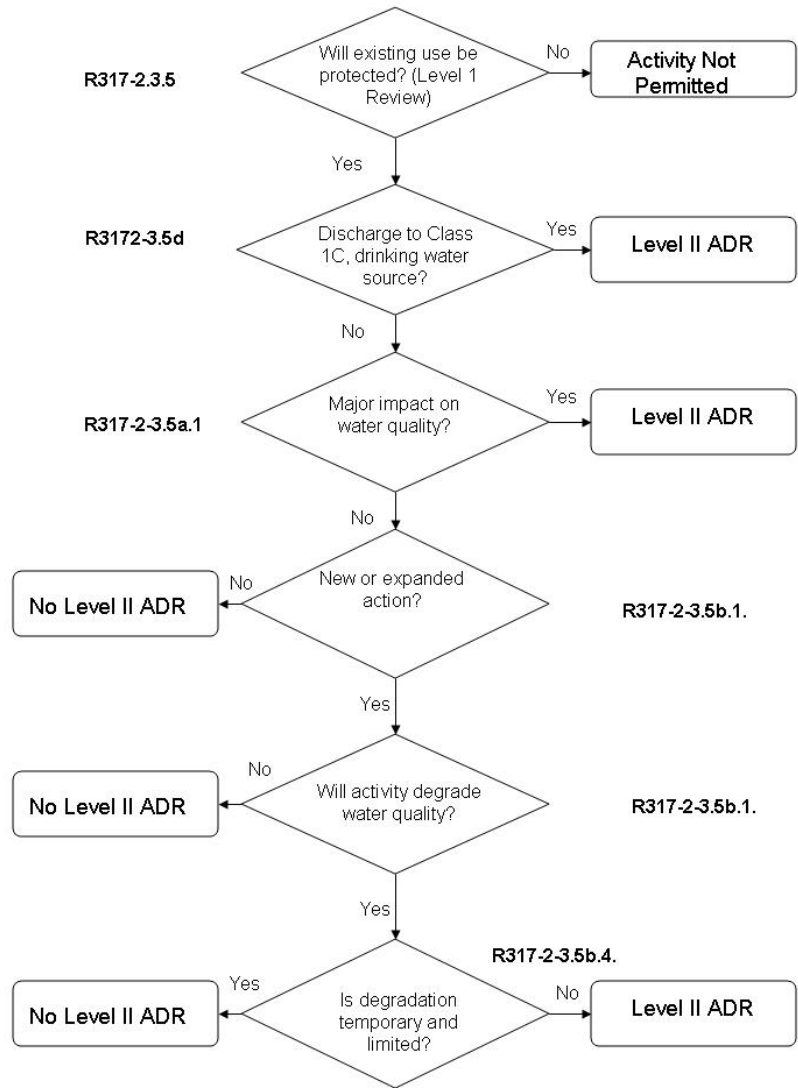
176 Level I reviews are intended to ensure that proposed actions will not impair “existing
177 uses”. Existing uses means those uses actually attained in a water body on or after
178 November 28, 1975 (UAC R317-1), whether or not they are included in the water quality
179 standards. For instance, if a stream currently only contains warm water fish species,
180 whereas it supported a trout fishery at some point after 1975, the “existing use” criteria
181 would be those for Class 3a (cold water fish and organisms in their necessary food
182 chain).

183 Neither State nor federal regulations permit impairment of an existing instream use,
184 and the Level I review simply asks whether there are existing uses with protection
185 requirements that are more stringent than the currently designated uses (R317-2-13).
186 DWQ is currently unaware of any discrepancies between the existing uses and the
187 designated beneficial use classes in R317-2-6.

188 Water quality permits will not be issued if the proposed project will impair existing
189 uses.

190 DWQ staff conduct Level I reviews as the first step in any permitting action by
191 comparing the concentration predicted by the waste load analyses after mixing to the
192 water criterion for the designated uses (R317-2-13) and more restrictive existing uses.
193 The permit applicant is responsible for submitting adequate data for DWQ to conduct
194 the Level I ADR. More information and permit applications are available at
195 http://www.waterquality.utah.gov/UPDES/updes_f.htm .

196



197
 198 Figure 1. The general process for determining whether a Level II ADR is required for DWQ
 199 UPDES permit. Expanded actions are increases in loads or concentrations (Section 3.3.1).
 200 Special considerations for other permits are discussed in Section 3.6.

201

202 **3.3 Level II Antidegradation Reviews**

203 A Level II ADR is required if the receiving water is designated with a 1C Drinking Water
204 Source Use or the Executive Secretary determines that the discharge may have a major
205 impact on water quality. Otherwise, all of the following conditions must apply before a
206 Level II ADR is required for a proposed activity: 1) it must be a new or expanded action,
207 2) it must be an action that is regulated by the DWQ, and 3) the action must have a
208 reasonable likelihood of degrading water quality. Additional details for each of the
209 preceding requirements are provided below.

210 **3.3.1 Activities that are Considered to be New or Expanded Actions**

211 New actions refer to facilities that are being proposed for construction, or actions that
212 are initiated for the first time. Expanded refers to a change in permitted or design
213 concentration or flow and corresponding pollutant loading. Examples of expanded
214 actions include:

- 215 • An increase in permitted concentrations;
- 216 • An increase in permitted flow;
- 217 • ~~A parameter is added to the permit for the first time and either concentration or~~
218 ~~flow increases.~~

219 ~~New~~ or expanded actions could include increases in discharge concentration resulting
220 from the construction of new or expanded industrial or commercial facilities. In general,
221 Level II ADRs will be conducted for POTWs based on the design basis of the facility, so
222 subsequent Level II reviews would typically only occur during facility planning and
223 design for construction. Periods when treatment systems are being designed,
224 redesigned, or expanded are often ideal opportunities for implementing new
225 technologies or evaluating long-term strategies for pollution control. The intent of this
226 provision is that any ~~level of POTW~~ capacity expansion would qualify as an action ~~for~~
227 potentially subject to a Level II ADR.

228 A permit authorizes a facility to discharge pollutants without explicit permit limits as
229 long as those pollutants are constituents of wastestreams, operations, or processes that
230 were clearly identified during the permit application process, regardless of whether or
231 not they were specifically identified as present in the facility discharges (see
232 memorandum from Robert Perciasepe, Assistant Administrator for Water, to Regional
233 Administrators and Regional Counsels, July 1, 1994, at Pages 2-3). These pollutants are
234 generally treated the same as pollutants with explicit permit limits with regards to ADRs,
235 *i.e.*, if a renewing permit maintains the *status quo*, no additional ADR is required.
236 However, the Executive Secretary of the Utah Water Quality Board can require ~~an a~~
237 Level II updated ADR for renewing permits if for instance if pollutant concentrations are
238 increasing but the permit limits are not being changed. ADR for any project, including
239 renewing permits, that will potentially have major impacts on if the proposed activity
240 could potentially degrade water quality.

Comment [C1]: Proposing to delete because if flow or concentration increases, a review is not dependant on a new parameter being added to permit.

241 3.3.2 *Actions Regulated by the DWQ*

242 Activities subject to ADR requirement include all activities that require a permit or
243 certification under the Clean Water Act. Special considerations for General Permits,
244 §401 Certifications, and Stormwater Permits are provided below.

245 3.3.3 *Activities that are not Considered to Result in Degradation or Additional*
246 *Degradation*

247 Level II ADRs are not required for projects that are not likely to result in degradation
248 of the receiving water. Nor are Level II ADRs typically required for projects when the
249 permit is being renewed with no increase in permitted flow or concentrations. Permits
250 that are being renewed met the ADR requirements when the permit was originally
251 issued and are not required to conduct additional ADRs in the absence of an increase in
252 ~~permitted flow or concentrations~~degradation. A regulated discharge activity may not be
253 considered to result in degradation if:

- 254 • Water quality will not be further degraded by the proposed activity (R317-2-
255 3.5.b(1)). Examples include¹:
 - 256 a. The proposed concentration-based effluent limit is less than or equal to
257 the ambient concentration in the receiving water during critical
258 conditions; or
 - 259 b. A UPDES permit is being renewed and the proposed effluent
260 concentration and loading limits are equal to or less than the
261 concentration and loading limits in the previous permit; or
 - 262 c. A UPDES permit is being renewed and new effluent limits are to be
263 added to the permit, but the new effluent limits are based on
264 maintaining or improving upon effluent concentrations and loads that
265 have been observed, including variability; or
- 266 • ~~A new or renewed UPDES permit is being issued, and water quality-based~~
267 ~~effluent limits are not required for a specific pollutant because it has~~
268 ~~been determined that the discharge will not cause, have reasonable~~
269 ~~potential to cause, or contribute to an exceedance of a State water~~
270 ~~quality standard for the pollutant.~~
- 271 • The activity will result in only temporary and limited degradation of water quality
272 (see Section 3.3.4); or
- 273 • Additional treatment is added to an existing discharge and the facility retains
274 their current permit limits and design capacity; or
- 275 • The activity is a thermal discharge that has been approved through a Clean
276 Water Act §316(a) demonstration.

Comment [c2]: Please provide feedback on the value of this exception.

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¹ At the time this guidance was prepared, UAC R317-2-3.5.b.1.(d) contains an additional example. This additional example was disapproved by USEPA during the standards approval process and DWQ will remedy this discrepancy in future rulemaking. If a permit was issued relying on the disapproved example, EPA could disapprove the permit. Therefore, the example in question is not included in the Implementation Guidance.

277 For some parameters, assimilative capacity is used when concentrations in the
278 discharge are less than ambient concentrations. For instance, if the pH in a discharge is
279 6 and ambient pH is 7, assimilative capacity for pH will be used and pH may be a
280 parameter of concern for a Level II ADR.

281 *3.3.4 Activities that are Considered to be Temporary and Limited*

282 This portion of the guidance is incomplete and the reader should contact DWQ for
283 assistance in the interim to determine if the activity will be considered temporary and
284 limited. A level II review may not be required if the Executive Secretary determines
285 degradation from a discharge qualifies as temporary and limited following a review of
286 information provided by the applicant (R317-2-3.5b(3) and (4)). The information
287 provided by applicant should include:

- 288 • length of time during which water quality will be lowered. As a general rule of
289 thumb, temporary means days or months not years;
- 290 • percent change in ambient conditions;
- 291 • pollutants affected;
- 292 • likelihood for long-term water quality benefits to the segment (e.g., as may
293 result from dredging of contaminated sediments);
- 294 • whether fish spawning, or survival and development of aquatic fauna will be
295 affected (excluding fish removal efforts);
- 296 • degree to which achieving the applicable Water Quality Standards during the
297 proposed activity may be at risk; and
- 298 • potential for any residual long-term influences on existing uses.

299 U.S. Fish and Wildlife Service and the Utah Division of Wildlife Resources should be
300 consulted to determine if the timing of the project potentially will affect fish spawning.
301 Clean Water Act Section 402 general permits, CWA Section 404 nationwide and general
302 permits, or activities of short duration may be deemed to have temporary and limited
303 effects on water quality. See Section 3.6 for additional detail.

304 **3.4 Responsibilities for Completing Level II ADR Documentation**

305 Early and frequent communication should occur between applicants and DWQ staff.
306 The applicant is responsible for compiling the information required for the selection of
307 Parameters of Concern (Section 4.0), Alternatives Analysis (Section 5.0), and the
308 Statement of Environmental, Social, or Economic Development (Section 6.0) and
309 selecting the preferred option. The applicant is also responsible for recommending the
310 parameters of concern and the preferred alternative to DWQ. However, DWQ staff will
311 assist where possible and provide timely comments to draft material to avoid delays in
312 the permitting process. Much of this information is compiled for other purposes such as
313 a Facility Plan. The suggested process for conducting Level II ADRs is shown in Figure 2.

314 **3.5 Timing of Level II ADRs and Interim Submittals**

315 ADR issues should be considered as early in the permitting or design process as
316 possible. Properly timed Level II ADRs are the most efficient use of time and resources.
317 For instance, many discharges already consider many of the requirements of Level II
318 alternative analyses (Section 5.0) while planning for construction of new facilities or
319 upgrades/expansion to existing facilities. Early planning also allows time to develop an
320 optional work plan which clearly defines a scope of work for developing alternatives.
321 The work plan minimizes miscommunication between DWQ staff and applicants and
322 documents decision points critical to the ADR. The work plan may be put out for public
323 comment, at the applicant’s discretion, so that stakeholder concerns can be addressed
324 early in the process, which is much easier and less time consuming than addressing
325 concerns at the end of the permitting process. Finally, early notification provides
326 sufficient time for the DWQ and applicants to work together to ensure that sufficient
327 data are available to generate defensible permit limits. The DWQ suggests that
328 whenever possible applicants initiate ADR processes one year or longer prior to the
329 desired date of a permit. The actual time required to complete the ADR is dependent
330 on the complexity of the ADR.

331 **3.6 Special Permit Considerations**

332 ~~Most of the implementation procedures discussed in this document~~
333 ~~are clearly applicable to UPDES permitting procedures. However, the~~
334 ~~DWQ also issues other types of permits, which have special ADR~~
335 ~~considerations. This portion of the guidance is incomplete and the~~
336 ~~reader should contact DWQ for assistance regarding these permits in~~
337 ~~the interim.~~

338 **3.6.1 General Permits**

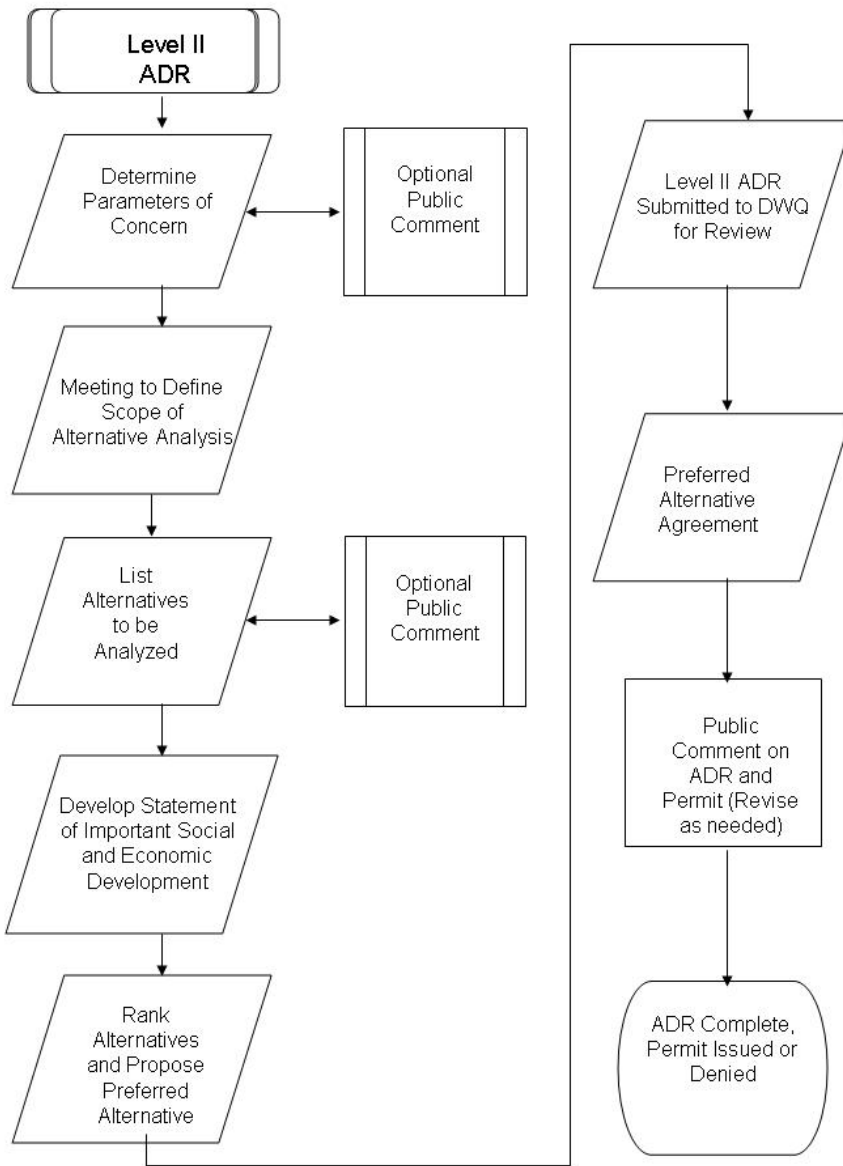
339 ~~A number of discharges to surface waters are authorized under~~
340 ~~general UPDES permits issued by the DWQ:~~

- 341 ~~• Animal Feeding Operations (AFOs),~~
- 342 ~~• Construction dewatering or hydrostatic testing,~~
- 343 ~~• Municipal stormwater,~~
- 344 ~~• Industrial stormwater,~~
- 345 ~~• Drinking water treatment plants,~~
- 346 ~~• Private on-site wastewater treatment systems,~~
- 347 ~~• Stream alteration permits,~~
- 348 ~~• Construction sites one acre or larger,~~
- 349 ~~• Coal mining operations and,~~
- 350 ~~• Discharge of treated groundwater.~~

351
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Comment [N3]: Moved Special Permit Considerations to Section 7.0.



353

354 Figure 2. Suggested process for completing a Level II Antidegradation Review (ADR).

355

356

357 ~~The Executive Secretary will determine the need for a Level II ADR for General Permits~~
358 ~~on a case by case basis until this implementation guidance is updated to fully address~~
359 ~~General Permits. New and reissued General Permits may require evaluation of the~~
360 ~~potential for degradation as a result of the permitted discharges if the discharges are not~~
361 ~~temporary and limited. DWQ anticipates expanding and revising the ADR guidance for~~
362 ~~general permits in future iterations.~~

363
364 3.6.2—§401 Certifications

365 ~~Section 404 of the Clean Water Act regulates the placement of dredged or fill material~~
366 ~~into the “waters of the United States,” including small streams and wetlands adjacent or~~
367 ~~connected to “waters of the United States.” The U.S. Army Corps of Engineers~~
368 ~~(CorpsUSACE) administers the §404 permit program dealing with these activities (e.g.,~~
369 ~~wetland fills, in-stream sand/gravel work, etc.) in cooperation with the EPA and in~~
370 ~~consultation with other public agencies. These activities are subject to ADR~~
371 ~~requirements (R317-2-3.5.a.1.). This portion of the guidance is incomplete and the~~
372 ~~reader should contact DWQ for assistance regarding ADRs for these permits in the~~
373 ~~interim.~~

374 ~~The Utah Stream Alteration Act of 1971, with subsequent amendments and~~
375 ~~modifications, regulates activities within the stream channel (UCA 73-3-29). The Stream~~
376 ~~Alteration Act requires that a permit be obtained from the State Engineer for any project~~
377 ~~that will alter the bed and bank of any natural stream. As a result of the Stream~~
378 ~~Alteration Act, USACE issued General Permit 040 in 1987 that authorizes the State~~
379 ~~Stream Alteration Permit to fulfill the requirements of Section 404 of the CWA for~~
380 ~~certain activities. The Stream Alteration program within the Division of Water Rights~~
381 ~~assumed the responsibility from the USACE for the regulation of fill and dredge~~
382 ~~operations within stream channels, except for those projects that involve listed threatened~~
383 ~~or endangered species, properties on the National Historic Register, navigable waters,~~
384 ~~channel relocations, or pushing streambed material against a streambank using heavy~~
385 ~~equipment.~~

386 ~~DWQ participates with the Resource Development Coordinating Committee (RDCC)~~
387 ~~which is a clearinghouse for information on activities affecting state and public~~
388 ~~lands which includes all waters of the state. Utah Code Title 19 Chapter 09 Section~~
389 ~~102 defines waters of the state as all streams, lakes, ponds, marshes, watercourses,~~
390 ~~waterways, wells, springs. The RDCC includes representatives from the state agencies~~
391 ~~that are generally involved or impacted by state and public lands management.—Utah~~
392 ~~Code (63J-4-501 *et seq.*) instructs the RDCC to coordinate the review of technical and~~
393 ~~policy actions that may affect the physical resources of the state and facilitate the~~
394 ~~exchange of information on those actions among federal, state, and local government~~
395 ~~agencies.—~~

396 ~~In order to ensure that antidegradation and other water quality protection requirements~~
397 ~~are considered, reviewed and met in a comprehensive and efficient manner, these~~
398 ~~requirements will be addressed and implemented through the permitting and §401 water~~
399 ~~quality certification processes. DWQ proposes to develop a permit application that~~
400 ~~addresses antidegradation that will be completed at the same time as the U.S. Army~~
401 ~~Corps of Engineers applications. Under this approach, applicants who fulfill the terms~~

402 ~~and conditions of applicable §404 permits and the terms and conditions of the~~
403 ~~corresponding §401 water quality certification will have fulfilled the antidegradation~~
404 ~~requirements.~~
405 ~~For minor activities covered under §404 general permits (e.g., road culvert installation,~~
406 ~~utility line activities, bank stabilization, etc.), antidegradation requirements will be~~
407 ~~deemed to be met if all appropriate and reasonable BMPs related to erosion and sediment~~
408 ~~control, project stabilization and prevention of water quality degradation (e.g., preserving~~
409 ~~vegetation, stream bank stability and basic drainage) are applied and maintained.~~
410 ~~Applicants desiring to fulfill ADR requirements under this approach will be responsible~~
411 ~~for ensuring that permit requirements and relevant water quality certification conditions~~
412 ~~are met.~~
413 ~~Utah manages its §401 water quality certification program to ensure that the placement of~~
414 ~~dredged or fill material into surface waters do not create any long term unmitigated water~~
415 ~~quality impairments or significant degradation of surface waters. Under the BMP-based~~
416 ~~approach adopted by Utah, regulated activities for which mitigation has been certified by~~
417 ~~the state pursuant to §401 of the Clean Water Act will not be required to undergo a~~
418 ~~separate Level II review.~~

419 ~~3.6.3 Individual Stormwater Permits~~

420 ~~This portion of the guidance is incomplete and the reader should contact DWQ for~~
421 ~~assistance in the interim. As general permits, stormwater permits are subject to an ADR~~
422 ~~unless the impact to water quality is temporary and limited. Factors to be considered in~~
423 ~~making a determination that the activity is temporary and limited are discussed in Section~~
424 ~~3.3.4.~~
425

426 **3.6.7 Public and Interagency Participation in ADRs**

427 Public participation is an important part of the ADR process. Public notice of
428 antidegradation review findings, solicitations of public comment and maintenance of
429 antidegradation review documents as part of the public record help ensure that
430 interested parties can be engaged and involved throughout the review process. In
431 addition, intergovernmental coordination and review is required prior to any action that
432 allows degradation of water quality of a surface water.

433 **3.6.7.1 Public Notification Process**

434 Ultimately, the completed ADR and associated documentation will be made available
435 for public comment through the processes required for UPDES permits. However, the
436 applicant may opt for earlier reviews upon completion of a work plan that defines the
437 parameters of concern and the alternatives to be considered for the Level II ADR
438 alternatives analysis. The primary purpose of these optional early reviews is to identify
439 stakeholder project concerns early in the permitting process when the comments can be
440 addressed most efficiently. If an early review is conducted, concerned members of the
441 public should use this work plan comment period to identify general concerns with the
442 proposed activity, additional parameters of concern that warrant consideration, or
443 additional treatment alternatives that should be considered. Figure 2 identifies decision
444 points in the process when DWQ recommends that the applicant solicit optional public

445 comments. DWQ will facilitate any optional public comment opportunities by making
446 the documents available on DWQ's website and the State's Public Notice website.
447 Responding to comments for any optional public comment opportunities is the
448 responsibility of the applicant. DWQ responds to comments for the mandatory public
449 comment period prior to issuing the permit.

450 | *3.67.2 Intergovernmental Coordination and Review*

451 Intergovernmental coordination is required prior to approving a regulated activity
452 that would degrade a surface water. This coordination will be conducted at a level
453 deemed appropriate by the Executive Secretary and will include any governmental
454 agency requesting involvement with the ADR.

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455 **4.0 IDENTIFICATION OF THE PARAMETERS OF CONCERN**

456 Parameters of concern are ~~a measured characteristic of the discharge that we be~~
457 evaluated in the Level II ADR. Only parameters in the discharge that exceed, or
458 potentially exceed, ambient concentrations in the receiving water should be considered
459 in selecting the parameters of concern.

460 **4.1 Determination of the Parameters of Concern**

461 The initial starting point should be the priority pollutants (EPA Form 2c
462 <http://www.waterquality.utah.gov/UPDES/EPAForm2C.pdf>), but other parameters may
463 be added or removed depending on the nature of the proposed project and the
464 characteristics of the receiving water. The following are considerations for selecting
465 parameters of concern:

- 466 1. Are there any parameters in the effluent or expected to be in the effluent
467 that exceed ambient concentrations in the receiving water?

468 Ambient concentrations are determined by DWQ at critical conditions
469 and provided to the applicant. Typically, ambient conditions are based
470 on, i.e., 80th percentile from the most recent 10 years of data. Critical
471 condition for bioaccumulative toxics is considered the 80th percentile
472 concentration and for conventional pollutants and non-bioaccumulative
473 toxics the average concentration. The applicant may elect to collect
474 water quality data to reduce uncertainty and assist DWQ in determining
475 existing ambient concentrations.

476 The effluent concentrations are the permitted ~~concentrationseffluent~~
477 limits or discharge concentration of the baseline treatment alternative.
478 For parameters that do not warrant permit effluent limits based on
479 DWQ's reasonable potential analysis, the 80th percentile of the effluent
480 concentrations should be used. If no discharge data is available for the
481 baseline treatment alternative, the concentration should be estimated
482 based on pilot studies, literature values, manufacturers guidelines and/or
483 best professional judgement.

484 In cases when the available data are limited, comparisons between
485 effluent/permitted and ambient concentrations may be conducted using
486 methods that minimize type II errors, i.e., erroneously concluding that a
487 pollutant will not degrade water quality. ~~In some cases, the applicant~~
488 ~~may elect to collect water quality data to reduce uncertainty and assist~~
489 ~~DWQ in determining existing ambient concentrations.~~

- 490 | 1-2. Is the parameter already included in an existing permit?
- 491 | 2-3. Are parameter concentrations and/or loads exceeding or projected to
492 | exceed the current permitted load or design basis?
- 493 | 3-4. Are there any parameters that are considered to be important by DWQ
494 | or the general public? For instance, nutrients or bioaccumulative
495 | compounds may be of concern for some surface waters. For discharges
496 | to Class 1C drinking water sources, any substances potentially deleterious
497 | to human health may be considered.
- 498 | 4-5. Are there parameters in the effluent that are known to potentially
499 | degrade the existing beneficial uses of the receiving water?
- 500 | 5-6. [Is the receiving water listed as impaired for any parameters? Parameters](#)
501 | [for which the receiving water is listed as impaired and have an ongoing or](#)
502 | [approved TMDL are not considered as part of the ADR and are addressed](#)
503 | [through the TMDL program.](#)

504 | The applicant, working with DWQ, should review all available data, from the discharge
505 | and the receiving water, and prepare a list of parameters which will be evaluated. DWQ
506 | will provide any available data from the receiving water to the applicant. The list of
507 | parameters of concern and supporting rationale should be submitted to DWQ. DWQ
508 | will review the list and provide preliminary approval pending public comment. Meetings
509 | between the applicant and DWQ are anticipated to be the most efficient way to resolve
510 | differences regarding parameters to be considered in the Level II ADR.

511 | Once the list of parameters of concern has been agreed to between DWQ and the
512 | applicant, the list could be made available to the public by DWQ for an optional
513 | comment period (see Section 3.7.1). After a 30-day comment period, the list may be
514 | refined or approved. This list and associated rankings will form the basis for further
515 | activities of the ADR and will ultimately be used to select the least degrading project
516 | alternative (Section 5).

517 | **4.1 Ranking the Parameters of Concern**

518 | [The parameters of concern may need to be ranked, or weighted, in order to](#)
519 | [determine overall water quality degradation of a given treatment alternative. Ranking](#)
520 | [and weighting factor considerations are provided below.](#)

- 521 | [1. For toxic POCs, recommend using the EPA's toxic weighting factors \(TWF\) for](#)
522 | [calculating toxic weighted pound equivalents \(TWPE\) for the POCs. EPA derives](#)
523 | [TWFs from chronic aquatic life criteria \(or toxic effect levels\) and human](#)
524 | [health criteria \(or toxic effect levels\) established for the consumption of fish in](#)
525 | [order to account for differences in toxicity across pollutants and to provide the](#)
526 | [means to compare mass loadings of different pollutants.](#)

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2. For non-toxic POCs, ranking and weighting factors should reflect the relative potential impact of the POC on the beneficial uses of the receiving water. As this determination involves application of best professional judgment, the weighting factors will need to developed in consultation with DWQ.

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533 **5.0 ALTERNATIVES ANALYSIS OF LEVEL II ADRS**

534 As the name suggests, the alternatives analysis requires, to the extent feasible,
535 documentation of the costs and environmental water quality benefits of alternative
536 treatment options. The purpose of an alternatives analysis is to evaluate whether there
537 are any reasonable non-degrading or less degrading alternatives for the proposed
538 activity~~identify the least polluting alternative for projects that are determined to be~~
539 ~~economically and socially necessary (Section 6.0).~~

540 **5.1 Development of a Scope of Work for Level II ADR Alternatives**
541 **Analysis**

542 The intent of this section is to provide a collaborative process to define a scope of
543 work for a Level II review which allows for analysis and document preparation.

544 The first suggested step in the scoping process will be to convene a meeting between
545 the applicant, project consultants, and DWQ to review the requirements found in R317-
546 2-3.5 as shown below:

547 *“For proposed UPDES permitted discharges, the following list of alternatives should*
548 *be considered, evaluated and implemented to the extent feasible:*

- 549 (a) *innovative or alternative treatment options*
 - 550 (b) *more effective treatment options or higher treatment levels*
 - 551 (c) *connection to other wastewater treatment facilities*
 - 552 (d) *process changes or product or raw material substitution*
 - 553 (e) *seasonal or controlled discharge options to minimize discharging during*
554 *critical water quality periods*
 - 555 (f) *pollutant trading*
 - 556 (g) *water conservation*
 - 557 (h) *water recycle and reuse*
 - 558 (i) *alternative discharge locations or alternative receiving waters*
 - 559 (j) *land application*
 - 560 (k) *total containment*
 - 561 (l) *improved operation and maintenance of existing treatment systems*
 - 562 (m) *other appropriate alternatives...*
- 563

564 *An option more costly than the cheapest alternative may have to be implemented*
565 *if a substantial benefit to the stream can be realized. Alternatives would generally be*
566 *considered feasible where costs are no more than 20% higher than the cost of the*
567 *discharging alternative, and (for POTWs) where the projected per connection service*
568 *fees are not greater than 1.4% of MAGI (median adjusted gross household income),*
569 *the current affordability criterion now being used by the Water Quality Board in the*
570 *wastewater revolving loan program. Alternatives within these cost ranges should be*
571 *carefully considered by the discharger. Where State financing is appropriate, a*
572 *financial assistance package may be influenced by this evaluation, i.e., a less*

573 *polluting alternative may receive a more favorable funding arrangement in order to*
574 *make it a more financially attractive alternative.”*

575 **5.2 Establishing the Baseline Treatment Alternative**

576 The Alternatives Analysis requires selecting the baseline treatment alternative, which
577 is defined as the treatment alternative that meets water quality standards and water
578 quality based permit effluent limits established by the wasteload analysis. The cost of
579 the baseline treatment alternative must be estimated for the purpose of assessing the
580 cost reasonableness of less degrading alternatives.

581 **5.3~~2~~ General Considerations for Selecting Treatment Alternatives for** 582 **Consideration**

583 For many projects, the Facility Plan documents the selection of the preferred
584 treatment option and may be sufficient to meet the alternatives analysis requirement of
585 the ADR depending on the specific parameters of concern. The following guidelines
586 should be considered when defining the scope of work for the alternatives analysis:

- 587 1. The feasibility of all alternatives should be examined before inclusion in the
588 options to be reviewed. If an option is not feasible, it should not be considered.
589 As an example, before pollutant trading is considered, willing partners in such
590 trading should be identified or the potential for trading should exist.
- 591 2. Innovative or alternative treatment options should be limited to proven or
592 successfully piloted processes.
- 593 3. The treatment options subject to review should focus on those which have the
594 greatest potential for water quality improvement for the parameters of concern.
595 Flexibility to modify the treatment process to address potential future changes in
596 waste streams or treatment requirements should also be considered.
- 597 4. When an instream need for the discharge water is deemed by the Executive
598 Secretary to be of significant importance to the beneficial use (i.e., if removal of
599 the discharge would result in a detrimental loss of stream flow), evaluation of
600 reuse, land disposal or total containment may be unnecessary.
- 601 5. Alternatives may be ranked in order of potential for parameter reduction.
602 Preference should be given to processes that have the greatest overall effect on
603 water quality. Typically, these highest ranked processes will have the greatest
604 reduction in pollutant load and affect the greatest number of parameters of
605 concern.
- 606 6. Before improved operations and maintenance are considered as a way to
607 prevent degradation, specific operation or maintenance activities should be
608 identified. If Executive Secretary and the applicant agree, a third party may be
609 used to assess potential for operations and maintenance improvements.

610 | **5.43 Special Project-Specific Scoping Considerations**

611 | The number of alternatives to be considered and the extent of planning details for
612 | alternative analyses may depend on the nature of the facility, size of the proposed
613 | discharge, the magnitude of degradation, and the characteristics of the receiving water.
614 | This section outlines screening procedures for determining reasonable alternatives that
615 | are appropriately scaled to the proposed project. The alternatives specified here are
616 | guidelines and may be modified from public comments or at the Executive Secretary's
617 | discretion.

618 | All discharges requiring a permit must be provided with a level of treatment equal to
619 | or exceeding the requirements in R317-3 for technology based effluent limitations. As
620 | provided in R317-2, minimum technology based treatment requirements for POTWs
621 | consist of secondary treatment and applicable limitations and standards. The
622 | technology based review for POTWs in the Clean Water State Revolving Fund (SRF)
623 | process is accomplished through the Facility's Plan and Environmental Assessment. The
624 | requirements of the process include an investigation of project need, alternatives,
625 | effluent limitations, future conditions, and an Environmental Assessment. The
626 | technology based review for POTWs subject to the SRF process generally is satisfied on
627 | completion of the Facility Plan, Environmental Assessment, public participation, and
628 | DWQ approval. The technology based review for POTWs that are not in the SRF process
629 | is conducted through the UPDES permitting process.

630 | The technology based review for non-POTW facilities likewise is conducted during the
631 | UPDES permitting and technology based requirements are applied when the permit is
632 | drafted. DWQ has adopted categorical standards for discharges from various types of
633 | industries. Existing industrial discharges are required to achieve the best conventional
634 | pollutant control technology for conventional pollutants and the best available
635 | technology for nonconventional and toxic pollutants. Certain new industrial discharges
636 | are required to comply with new source performance standards based on the best
637 | available demonstrated control technology. Effluent limitations for parameters or
638 | industries not covered by the categorical standards and limitations are established on a
639 | case-by-case basis, based on best professional judgment. The technology review is
640 | complete when the Executive Secretary approves the draft permit.

641 | If a Level II review was conducted for the facility for a previous renewal [and a Level II](#)
642 | [review is required for permit reissuance](#), and if the ~~is~~ previous [Level II](#) review was based
643 | on the design basis of the facility, the applicant should ~~submit~~ [include](#) a written
644 | statement ~~to DWQ~~ certifying that: 1) all alternative treatment processes remain
645 | applicable and that the applicant is not aware of alternatives that were not previously
646 | considered, 2) that reasonable alternative operation and maintenance procedures are
647 | not available that would reduce degradation of the receiving water if implemented.

648 |

649 | **5.54 Finalizing the Alternatives Work Plan**

650 | Once a scope of work is agreed to between DWQ and the applicant, the scope of work
651 | should be documented in a work plan. The work plan can be made available to the
652 | public and can be published on the State Public Notice website at the applicant’s
653 | discretion. The scope of work may be modified in response to public comments, at the
654 | applicant’s discretion. This public comment period may be held concurrent with the
655 | comment period for the parameters of concern, both of which are at the applicant’s
656 | discretion.

657 | For the optional public comment periods, DWQ can be the recipient of the comments
658 | but the applicant has the responsibility of addressing the comments. A comment
659 | response document is not required, but DWQ recommends that the applicant respond
660 | to the comments in writing. If DWQ is not the recipient of the comments, the applicant
661 | should share the comments received with DWQ in a timely manner.

662 | Additional alternatives may be identified during the public comment period or during
663 | evaluation of the alternatives. These possible changes to the scope to the alternatives
664 | analyses should be reviewed by the Applicant and DWQ for inclusion in the work plan as
665 | needed.

666 | **5.65 Materials to be Submitted with Alternative Analyses**

667 | For the DWQ to fairly evaluate alternative treatments, the following information
668 | should be provided for each alternative process:

- 669 | 1. A technical description of the treatment process, including construction costs
670 | and continued operation and maintenance expenses.
- 671 | 2. The mass and concentration of discharge constituents, and a description of the
672 | discharge location.
- 673 | 3. A description of the reliability of the system.
- 674 | 4. A ranking of each alternative in terms of its relative ability to minimize
675 | degradation to the receiving water (see Section 5.6).
- 676 | 5. A ranking of each alternative as to how adaptable it would be to potentially
677 | changing regulatory requirements.

678

679 | **5.76 Procedures for Evaluating the Preferred Alternative**

680 | **5.76.1 Applicant Ranking of Treatment Alternatives**

681 | The alternatives should be ranked from the least-degrading to the most-degrading
682 | alternative, as determined from the established and ranked pollutants of concern.
683 | Creating a ranked hierarchy of alternatives helps to simplify the applicant’s selection of

684 a “preferred” alternative. By ranking alternatives in this way, the applicant can avoid
 685 having to perform a detailed economic analysis on the universe of available alternatives,
 686 instead focusing efforts on only the “top” or least-degrading alternative. In a following
 687 step the applicant either selects the “top” alternative as the “preferred” alternative or
 688 conducts a more detailed review to justify eliminating that alternative from further
 689 consideration (e.g., the option would be too costly).

690 The applicant should identify situations in which different alternatives are more or
 691 less degrading for individual pollutants. In these cases, the applicant should identify and
 692 document its rationale regarding the alternative that – on the whole – is least-
 693 degrading. For example, alternative A might be least-degrading for TDS, but result in a
 694 more degradation than alternative B for selenium. If there were a downstream
 695 impairment for TDS, that might influence a decision that the overall least-degrading
 696 alternative in our example was alternative A. On the other hand, if there was no
 697 impairment downstream and the assimilative capacity reduction for TDS was 10 percent
 698 and the selenium reduction in assimilative capacity was 75 percent, the preferred
 699 alternative might be alternative B.

700 For more complex evaluations of alternatives, the ranking of alternatives could be
 701 based on the development of a matrix giving the weighting of each parameter of
 702 concern against each other and the rating of benefit the alternative has for the
 703 individual parameter of concern. The rankings and a description of the rationale for
 704 parameter weightings and overall rankings should be compiled and submitted to the
 705 DWQ. The following is an example rating matrix that could be used in this process:

706

Parameters of Concern --> Alternatives Considered	P-1	Weight	P-2	Weight	P-3	Weight	Total
Alternative 1		%		%		%	
Alternative 2		%		%		%	
Alternative 3		%		%		%	
Alternative 4		%		%		%	
Alternative 5		%		%		%	
		100%		100%		100%	
P-1, P-2, and P-3 represent parameters of concern and/or other defined issues.							

707

708

709

710 Also, below is an example scale for determining the benefit of each alternative for the
711 given parameter of concern.

Ratings:	
Minor Improvement	1
Modest Improvement	2
Reasonable Improvement	3
Good Improvement	4
Excellent Improvement	5

712

713 | *5. ~~7.2~~ Review and Selection of the Preferred Alternative*

714 The applicant will recommend the preferred alternative to DWQ. DWQ will review
715 the ratings developed by the applicant or their consultant. The Alternatives should be
716 listed from the one showing the most improvement to the one showing the least
717 improvement for water quality from the scores in the matrix. The costs for each
718 alternative should be listed with its ranking and the rankings should then be evaluated.

719 In determining the selected alternative, the following items should be considered and
720 evaluated:

- 721 | 1. ~~The Existing section in R-317-2-3.5.c that govern~~ states: "An option more costly
722 than the cheapest alternative may have to be implemented if a substantial
723 benefit to the stream can be realized. Alternatives would generally be
724 considered feasible where costs are no more than 20% higher than the cost of
725 the discharging alternative, and (for POTWs) where the projected per connection
726 service fees are not greater than 1.4% of MAGI (median adjusted gross
727 household income), the current affordability criterion now being used by the
728 Water Quality Board in the wastewater revolving loan program. Alternatives
729 within these cost ranges should be carefully considered by the discharger. Where
730 State financing is appropriate, a financial assistance package may be influenced
731 by this evaluation, i.e., a less polluting alternative may receive a more favorable
732 funding arrangement in order to make it a more financially attractive
733 alternative."
- 734 2. Alternative Operations and Maintenance (O&M) scenarios should be considered
735 in the ranking process. An Alternative O&M scenario will generally be considered
736 feasible if the annual cost increase is no more than 10% of the annual operating
737 cost or 20% of the 20-year present worth, whichever is less.
- 738 3. In considering alternatives, the review should consider the current zoning
739 requirement surrounding the facility being evaluated.
- 740 4. When different alternatives have similar potential to reduce degradation of
741 water quality, ~~the selected alternative should also demonstrate that a net
742 environmental benefit is being achieved. These more broad evaluations could~~

743 | ~~include a determination of the carbon footprint the alternative has compared to~~
744 | ~~the other alternatives, or other environmental benefits that may be achieved by~~
745 | ~~the alternative such as the preservation on stream flow~~other ancillary water
746 | quality benefits should be considered such as maintenance or enhancement of
747 | instream flow and miminizing release of greenhouse gases that could contribute
748 | to higher water temperatures.

749 | 5. Optional mitigation projects may also be included with any selected alternative
750 | when it is deemed to be cost effective and environmentally beneficial. If the
751 | discharger includes a mitigation project with an alternative, consideration should
752 | be given to the expected net benefits to water quality of both the discharge and
753 | mitigations when ranking project alternatives.

754 | 6. The review of the selected alternative should also include factors such as
755 | reliability, maintainability, operability, sustainability, and adaptability to
756 | potentially changing discharge requirements.

757 | 7. Also included in the review should be consideration of the sensitivity of receiving
758 | water and its potential for overall improvement.

759 | *5.76.3 Opportunity for Public Comment and Review of the Preferred Alternative*

760 | Once the preferred alternative is selected, an optional public comment period may
761 | be conducted by being posted on the DWQ website and being noticed in the State of Utah
762 | Public Notice Website (see Section 3.7.1.). If no optional reviews are conducted, the
763 | public has an opportunity to comment during the UPDES public comment period.

764

765 **6.0 IMPLEMENTATION PROCEDURES FOR DEVELOPMENT OF A**
766 **STATEMENT OF SOCIAL, ENVIRONMENTAL, AND ECONOMIC**
767 **IMPORTANCE (SEEI)**

768 Beyond the alternatives analysis, the second key component of a Level II ADR is a
769 Statement of Social, Environmental, and Economic Importance (SEEI). The SEEI
770 evaluates the societal benefits of the proposed activity by documenting factors such as:
771 employment, production, tax revenues, housing, and correction of other societal
772 concerns (i.e., health or environmental concerns). This portion of the ADR provides the
773 project proponent the opportunity to document that the overall benefits of the project
774 outweigh any negative consequences to ~~the environment~~ [water quality](#). As a result, the
775 project proponent is best served by making this portion of the ADR as thorough as
776 possible. At a minimum this portion of the review should contain the following:

- 777 1. A description of the communities directly affected by the proposed project,
778 including factors such as: rate of employment, personal or household
779 income, poverty level, population trends, increasing production, community
780 tax base, etc.
- 781 2. An estimate of important social and economic benefits that would be
782 realized by the project, including the number and nature of jobs created and
783 projected tax revenues generated.
- 784 3. An estimate of any social and economic costs of the project, including any
785 impacts on commercial or recreational uses.
- 786 4. A description of environmental benefits of the project and associated
787 mitigation efforts (if any). For instance, if a project would result in an
788 increase in stream flow that would provide additional habitat and a net
789 benefit to stream biota, this benefit would be documented in this section of
790 the review.
- 791 5. Documentation of local government support.

792 As with the Alternatives Analysis portion of the ADR, the size and scope of the SEEI
793 should be commensurate with the size of the proposed project. The applicant may
794 reference existing documents that address alternatives such as Environmental Impact
795 Statements. Also, it is in the best interest of the project proponent to make the SEEI as
796 thorough as possible if the project is likely to be controversial.

797

798 **6.1 Regulatory Framework**

799 The need for SEEs comes from 40 CFR 131.12(a)(2), which states, “Where the quality
800 of waters exceeds levels necessary to support fish, shellfish, and wild life and recreation
801 in and on the water, the quality shall be maintained and protected unless the State find,
802 ..., that allowing lower water quality is necessary to accommodate social or economic
803 development in the area in which the waters are located...” (emphasis added).

804 Accordingly, UAC R317-2-3.5(c)4 specifically calls for SEEI demonstrations:

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

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

811 *(a) employment (i.e., increasing, maintaining, or avoiding a reduction in*
812 *employment);*

813 *(b) increased production;*

814 *(c) improved community tax base;*

815 *(d) housing;*

816 *(e) correction of an environmental or public health problem; and*

817 *(f) other information that may be necessary to determine the social and*
818 *economic importance of the proposed surface water discharge.”*

819 If the proposed discharge is from a POTW, the economic or social importance
820 requirement will be generally considered met because local government support is
821 implicit as demonstrated by the use of public funding.

822

823

824 **6.2 Important Considerations in developing SEEs**

825 The DWQ anticipates that the specific information provided in the SEEI will vary
826 depending on the nature of the project and the community or communities that will be
827 affected by the proposed activity. Nonetheless, this section provides guidance for some
828 of the social and economic considerations that the applicant may want to include with
829 the SEEI portion of the Level II ADR. Many of the decisions relating to the social and
830 economic considerations are local in nature and the local government agencies should
831 be consulted to determine directions that are appropriate.

832 | The SEEI is about proving-demonstrating that the degradation will support important
833 social and economic development in the local area. The SEEI is not about the economic
834 | benefits to an individual or corporation. Instead, the SEEI is intended to supports an
835 informed public discussion and decision about the pros and cons of allowing water
836 quality degradation. If the lowering of water quality resulting from the preferred
837 alternative is not in the overriding public interest, then a less-degrading alternative must
838 be selected or the permit may be denied. If the lowering of water quality is found to be
839 in the overriding public interest, this finding is documented and submitted for public
840 comment along with the draft permit incorporating the preferred alternative.

841 *6.2.1 Effects on Public Need/Social Services*

842 Identify any public services, including social services that will be provided to or
843 required of the communities in the affected area as a result of the proposed project.
844 Explain any benefits that will be provided to enhance health/nursing care, police/fire
845 protection, infrastructure, housing, public education, etc.

846 *6.2.2 Effects on Public Health/Safety*

847 Identify any health and safety services that will be provided to or required of the
848 communities in the affected area as a result of the proposed project. Explain any
849 benefits that will be provided to enhance food/drinking water quality, control disease
850 vectors, or to improve air quality, industrial hygiene, occupational health or public
851 safety. One example is the construction of a central treatment plant to correct
852 problems with failing septic systems. Another example might be removal or additions of
853 toxic or bacteriological pollutants, which reduce life expectancy and increased illness
854 rates.

855 *6.2.3. Effect on Quality of Life*

856 Describe the impacts of the proposed project on the quality of life for residents of the
857 affected area with respect to educational, cultural and recreational opportunities, daily
858 life experience (dust, noise, traffic, etc.) and aesthetics (viewscape).

859 *6.2.4. Effect on Employment*

860 Explain the impacts of the proposed project on employment practices in the affected
861 area. Identify the number and type of jobs projected to be gained or lost as a result of

862 the proposed project. Will the proposed project improve employment or mean
863 household income in the affected area?

864 *6.2.5 Effect on Tax Revenues*

865 Explain the impact of the proposed project on tax revenues and local or county
866 government expenditures in the affected area. Will the project change property values
867 or the tax status of properties? If yes, explain whether that change is a beneficial or
868 detrimental to residents/businesses in the affected area.

869 *6.2.6 Effect on Tourism*

870 Discuss the effects the proposed project may have on the economy of the affected
871 area by creating new or enhancing existing tourist attractions. Conversely, describe any
872 impacts resulting from the elimination of or reduction in existing attractions.

873 *6.2.7 Preservation of assimilative capacity*

874 Review the pros and cons of preserving assimilative capacity for future industry and
875 development. Applicants are encouraged to talk with local stakeholders such as
876 planning, zoning, and economic development officials about their development plans,
877 and should summarize the communities' position on utilizing assimilative capacity for
878 the proposed project versus future plans or needs.

879 *6.2.8 Other Factors*

880 Provide any other information that would explain why it is necessary to lower water
881 quality to accommodate this proposed project. This category should be used to address
882 any social or economic factors not considered above.

883 **6.3 Review and Approval of SEEs**

884 The Executive Secretary will generally consider public projects to be necessary to
885 accommodate social and economic growth unless compelling information exists to the
886 contrary. DWQ may consult with local and State planning and zoning agencies to
887 determine whether or not the project is consistent with the long-term plans of affected
888 communities. Information obtained from local planning groups may be compiled with
889 other material obtained through the ADR process. The Executive Secretary will make a
890 determination. Appeals to the Executive Secretary's decision may be made to the
891 [consistent with the procedures for administrative appeals.](#) ~~Water Quality Board~~

892 **6.4 Public Comment Procedures**

893 At a minimum the SEI material will be submitted for public comment, along with all
894 other Level II ADR materials, through the required public comment processes used for
895 permit applications and renewals. However, as described in Section 3.5, the applicant
896 may include a cursory, or preliminary, SEI with the work plan, because much of the
897 information described in SEI reports help explain the greater socioeconomic context
898 within which the project takes place.

899

900 **7.0 SPECIAL PERMIT CONSIDERATIONS**

901 Most of the implementation procedures discussed in this document are clearly
902 applicable to UPDES permitting procedures. However, the DWQ also issues other types
903 of permits, which have special ADR considerations. This portion of the guidance is
904 incomplete and the reader should contact DWQ for assistance regarding these permits
905 in the interim.

906 **7.1 Individual Stormwater Permits**

907 This portion of the guidance is incomplete and the reader should contact DWQ for
908 assistance in the interim. Stormwater permits are subject to an ADR unless the impact
909 to water quality is temporary and limited.

910 **7.2 General Permits**

911 A number of discharges to surface waters are authorized under general UPDES
912 permits issued by the DWQ:

- 913 • Animal Feeding Operations (AFOs),
- 914 • Construction dewatering or hydrostatic testing,
- 915 • Municipal stormwater,
- 916 • Industrial stormwater,
- 917 • Drinking water treatment plants,
- 918 • Private on-site wastewater treatment systems,
- 919 • Construction sites one acre or larger,
- 920 • Coal mining operations and,
- 921 • Discharge of treated groundwater.

922

923 The Executive Secretary will determine the need for a Level II ADR for General Permits
924 on a case-by-case basis until this implementation guidance is updated to fully address
925 General Permits. New and reissued General Permits may require evaluation of the
926 potential for degradation as a result of the permitted discharges if the discharges are
927 not temporary and limited. DWQ anticipates expanding and revising the ADR guidance
928 for general permits in future iterations.

929 **7.3 §401 Certifications**

930 Section 404 of the Clean Water Act regulates the placement of dredged or fill material
931 into the “waters of the United States,” including small streams and wetlands adjacent or
932 connected to “waters of the United States.” The U.S. Army Corps of Engineers (USACE)
933 administers the §404 permit program dealing with these activities (e.g., wetland fills, in-
934 stream sand/gravel work, etc.) in cooperation with the EPA and in consultation with
935 other public agencies.

936 The Utah Stream Alteration Act of 1971, with subsequent amendments and
937 modifications, regulates activities within the stream channel (UCA 73-3-29). The Stream

938 Alteration Act requires that a permit be obtained from the State Engineer for any
939 project that will alter the bed and bank of any natural stream. As a result of the Stream
940 Alteration Act, USACE issued General Permit 040 in 1987 that authorizes the State
941 Stream Alteration Permit to fulfill the requirements of Section 404 of the CWA for
942 certain activities. The Stream Alteration program within the Division of Water Rights
943 assumed the responsibility from the USACE for the regulation of fill and dredge
944 operations within stream channels, except for those projects that involve listed
945 threatened or endangered species, properties on the National Historic Register,
946 navigable waters, channel relocations, or pushing streambed material against a
947 streambank using heavy equipment.

948 These activities are subject to ADR requirements (R317-2-3.5.a.1.). This portion of the
949 guidance is incomplete and the reader should contact DWQ for assistance regarding
950 ADRs for these permits in the interim.

Comment [NvS4]: Need to add language regarding Stream Alteration Permit

951 **87.0 ISSUES FOR FUTURE ITERATIONS OF THE IMPLEMENTATION** 952 **GUIDANCE**

953 As discussed in Section 1.0, the initial versions of this guidance focus on UPDES
954 permits with the exception of general permits. For the topics listed below in Section
955 7.1, the guidance is incomplete. The existing guidance provided for these topics
956 represents DWQ's current thinking but is incomplete and should be applied with
957 caution. For activities requiring ADRs, but not yet completely addressed in guidance, the
958 permittee should consult DWQ for assistance. These ADRs will be conducted on a case-
959 by-case basis consistent with the requirements of R317-2-3.

960 **87.1 Planned Future Additions to the Guidance**

- 961 1. Glossary. A glossary of that defines important terms used in the guidance will be added
962 to future iterations.
- 963 2. Acronym Key. A key that identifies the acronyms used in the guidance will be added to
964 future iterations.
- 965 3. References. References will be added to future iterations of the guidance.
- 966 4. Temporary and Limited. Guidance on how to determine if a discharge qualifies as
967 temporary and limited will be added to future iterations.
- 968 5. General permits and 401 Certifications. General Permits that are subject to ADR
969 requirements include:
970 Animal Feeding Operations (AFOs),
971 Construction dewatering or hydrostatic testing,
972 Municipal stormwater,
973 Industrial stormwater,
974 Drinking water treatment plants, Private on-site wastewater treatment systems
975 Stream alteration permits,
976 Construction sites one acre or larger,
977 Coal mining operations and,
978 Discharge of treated groundwater.