

Utah Antidegradation Review Implementation Guidance

Version 1.~~21~~

12/26/2012

DRAFT for COMMENT

Do not cite or quote

This draft has not been approved by DWQ management

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 THE ANTIDegradATION PROCESS 1

2.1 ASSIGNING PROTECTION CATEGORIES 2

2.1.1 *Category 1 Waters* 2

2.1.2 *Category 2 Waters* 2

2.1.3 *Category 3 Waters* 2

2.2 PROCEDURES FOR ASSIGNING PROTECTION CATEGORIES 3

2.2.1 *Material to Include with a Nomination* 3

2.2.2 *Considerations for Appropriate Data and Information to Include with Nominations to Increase Protection of Surface Waters* 3

2.2.3 *Considerations for Appropriate Data and Information for Consideration to Decrease Protection of Surface Waters* 4

2.2.4 *Public Comment Process for Proposed Reclassifications* 4

2.2.5 *Reclassification Decision Making Process* 5

3.0 ANTIDegradATION REVIEW GENERAL PROCEDURES 6

3.1 OVERVIEW OF ANTIDegradATION REVIEW PROCEDURES 6

3.2 LEVEL I ANTIDegradATION REVIEWS 6

3.3 LEVEL II ANTIDegradATION REVIEWS 8

3.3.1 *Activities that are Considered to be New or Expanded Actions* 8

3.3.2 *Actions Regulated by the DWQ* 8

3.3.3 *Activities that are not Considered to Result in Degradation or Additional Degradation* 9

3.3.4 *Activities that are Considered to be Temporary and Limited* 9

3.4 RESPONSIBILITIES FOR COMPLETING LEVEL II ADR DOCUMENTATION 10

3.5 TIMING OF LEVEL II ADRs AND INTERIM SUBMITTALS 10

3.6 PUBLIC AND INTERAGENCY PARTICIPATION IN ADRs 13

3.6.1 *Public Notification Process* 13

3.6.2 *Intergovernmental Coordination and Review* 13

4.0 IDENTIFICATION OF THE PARAMETERS OF CONCERN 14

4.1 DETERMINATION OF THE PARAMETERS OF CONCERN 14

4.1 RANKING THE PARAMETERS OF CONCERN 15

5.0 ALTERNATIVES ANALYSIS OF LEVEL II ADRs 17

5.1 DEVELOPMENT OF A SCOPE OF WORK FOR LEVEL II ADR ALTERNATIVES ANALYSIS 17

5.2 ESTABLISHING THE BASELINE TREATMENT ALTERNATIVE 18

5.3 GENERAL CONSIDERATIONS FOR SELECTING TREATMENT ALTERNATIVES FOR CONSIDERATION 18

5.4 SPECIAL PROJECT-SPECIFIC SCOPING CONSIDERATIONS 19

5.5 FINALIZING THE ALTERNATIVES WORK PLAN 19

5.6 MATERIALS TO BE SUBMITTED WITH ALTERNATIVE ANALYSES 20

5.7 PROCEDURES FOR EVALUATING THE PREFERRED ALTERNATIVE 20

5.7.1 *Applicant Ranking of Treatment Alternatives* 20

5.7.2 *Review and Selection of the Preferred Alternative* 22

5.7.3 *Opportunity for Public Comment and Review of the Preferred Alternative* 23

6.0 IMPLEMENTATION PROCEDURES FOR DEVELOPMENT OF A STATEMENT OF SOCIAL, ENVIRONMENTAL, AND ECONOMIC IMPORTANCE (SEEI) 24

6.1 REGULATORY FRAMEWORK 25

6.2	IMPORTANT CONSIDERATIONS IN DEVELOPING SEEIS	26
6.2.1	<i>Effects on Public Need/Social Services</i>	26
6.2.2	<i>Effects on Public Health/Safety</i>	26
6.2.3	<i>Effect on Quality of Life</i>	26
6.2.4	<i>Effect on Employment</i>	26
6.2.5	<i>Effect on Tax Revenues</i>	27
6.2.6	<i>Effect on Tourism</i>	27
6.2.7	<i>Preservation of assimilative capacity</i>	27
6.2.8	<i>Other Factors</i>	27
6.3	REVIEW AND APPROVAL OF SEEIS	27
6.4	PUBLIC COMMENT PROCEDURES	28 27
7.0	SPECIAL PERMIT CONSIDERATIONS	29 28
7.1	INDIVIDUAL STORMWATER PERMITS	29 28
7.2	GENERAL PERMITS	29 28
7.3	§401 CERTIFICATIONS	29 28
8.0	ISSUES FOR FUTURE ITERATIONS OF THE IMPLEMENTATION GUIDANCE	30 29
8.1	PLANNED FUTURE ADDITIONS TO THE GUIDANCE	30 29

1.0 INTRODUCTION

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

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

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

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

2.0 THE ANTIDEGRADATION PROCESS

Antidegradation reviews (ADRs) are required, as part of the permitting process, for any action that has the potential to degrade water quality. Activities subject to ADRs include any activities that require a permit or water quality certification pursuant to federal law. The ADR process involves: 1) classification of surface waters into protection categories, and 2) documenting that activities likely to degrade water quality are necessary and that all State and Federal procedures have been followed to ensure that 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 are permitted
79 for Category 3 waters provided that 1) existing uses are protected, 2) the degradation is

80 necessary, 3) the activity supports important social or economic development in the
81 area where the waters are located, and 4) all statutory and regulatory requirements are
82 met in the area of the discharge. Antidegradation rules also apply for any proposed new
83 or expanded discharge that is likely to degrade water quality. ADRs require that these
84 proposed actions demonstrate that such proposed projects are necessary to
85 accommodate social and economic development, and that all reasonable alternatives to
86 minimize degradation of water quality have been explored. These implementation
87 procedures provide details about how ADRs are implemented to meet these
88 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 2.2.2).
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.

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 public notice and comment
162 procedures.

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**

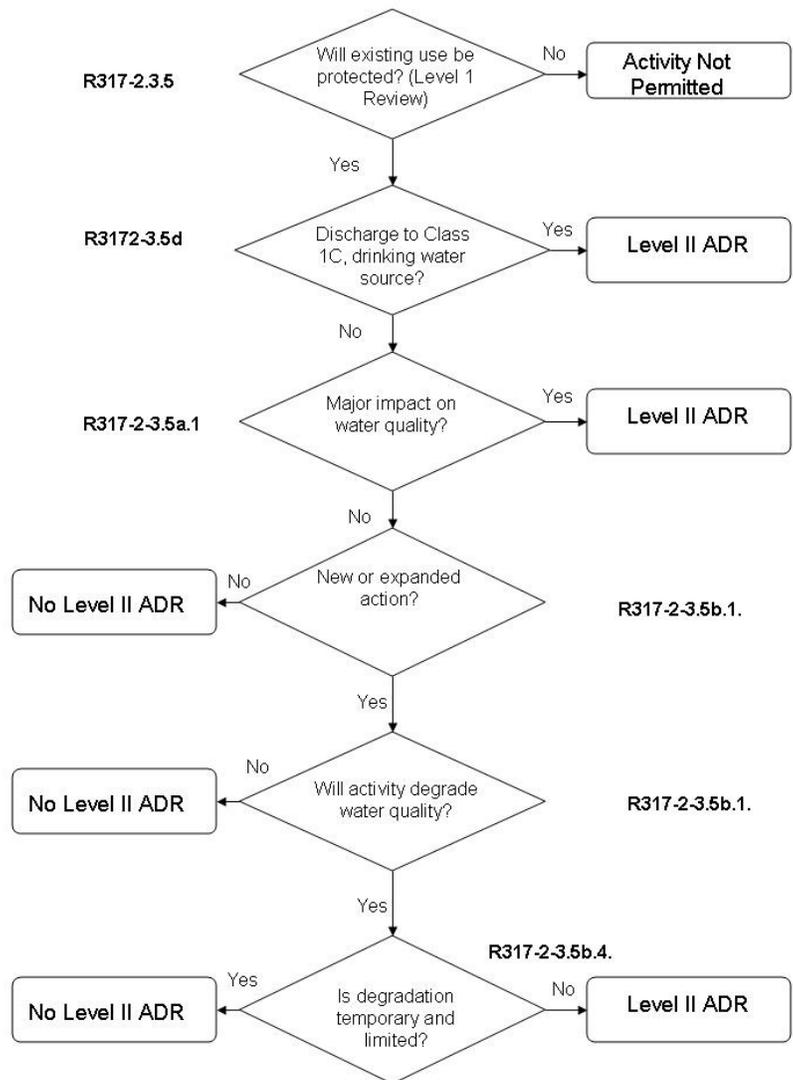
176 Level I reviews are intended to ensure that proposed actions will not impair “existing
177 uses”. Existing uses means those uses actually attained in a water body on or after
178 November 28, 1975 (UAC R317-1), whether or not they are included in the water quality
179 standards. For instance, if 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 **New** or expanded actions could include increases in discharge concentration resulting
218 from the construction of new or expanded industrial or commercial facilities. In general,
219 Level II ADRs will be conducted for POTWs based on the design basis of the facility, so
220 subsequent Level II reviews would typically only occur during facility planning and
221 design for construction. Periods when treatment systems are being designed,
222 redesigned, or expanded are often ideal opportunities for implementing new
223 technologies or evaluating long-term strategies for pollution control. The intent of this
224 provision is that any POTW capacity expansion would qualify as an action potentially
225 subject to a Level II ADR.

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

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

237 *3.3.2 Actions Regulated by the DWQ*

238 Activities subject to ADR requirement include all activities that require a permit or
239 certification under the Clean Water Act. Special considerations for General Permits,
240 §401 Certifications, and Stormwater Permits are provided below.

241 **3.3.3 Activities that are not Considered to Result in Degradation or Additional**
242 **Degradation**

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

- 250 • Water quality will not be further degraded by the proposed activity (R317-2-
251 3.5.b(1)). Examples include¹:
 - 252 a. The proposed concentration-based effluent limit is less than or equal to
253 the ambient concentration in the receiving water during critical
254 conditions; or
 - 255 b. A UPDES permit is being renewed and the proposed effluent
256 concentration and loading limits are equal to or less than the
257 concentration and loading limits in the previous permit; or
 - 258 c. A UPDES permit is being renewed and new effluent limits are to be
259 added to the permit, but the new effluent limits are based on
260 maintaining or improving upon effluent concentrations and loads that
261 have been observed, including variability; or
- 262 • The activity will result in only temporary and limited degradation of water quality
263 (see Section 3.3.4); or
- 264 • Additional treatment is added to an existing discharge and the facility retains
265 their current permit limits and design capacity; or
- 266 • The activity is a thermal discharge that has been approved through a Clean
267 Water Act §316(a) demonstration.

268 For some parameters, assimilative capacity is used when concentrations in the
269 discharge are less than ambient concentrations. For instance, if the pH in a discharge is
270 6 and ambient pH is 7, assimilative capacity for pH will be used and pH may be a
271 parameter of concern for a Level II ADR.

272 **3.3.4 Activities that are Considered to be Temporary and Limited**

273 This portion of the guidance is incomplete and the reader should contact DWQ for
274 assistance in the interim to determine if the activity will be considered temporary and
275 limited. A level II review may not be required if the Executive Secretary determines
276 degradation from a discharge qualifies as temporary and limited following a review of

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

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 information provided by the applicant (R317-2-3.5b(3) and (4)). The information
278 provided by applicant should include:

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

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

295 **3.4 Responsibilities for Completing Level II ADR Documentation**

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

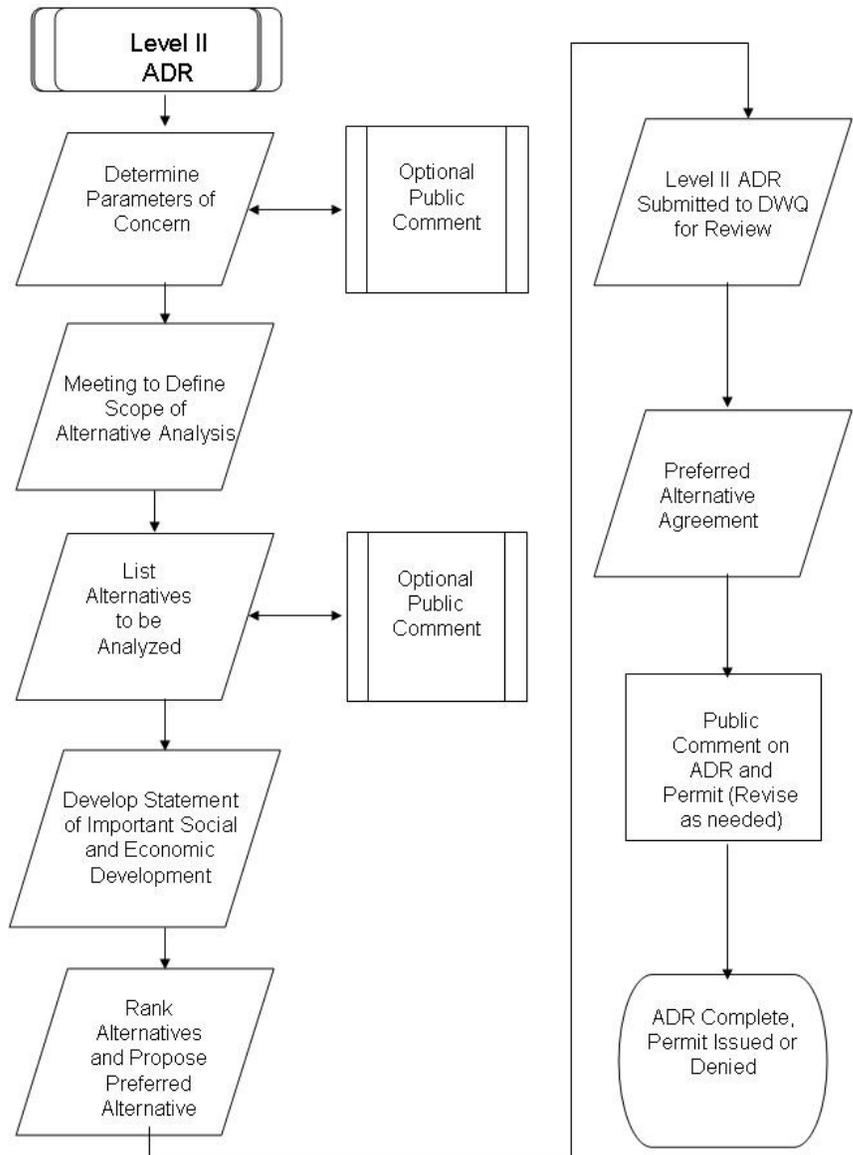
305 **3.5 Timing of Level II ADRs and Interim Submittals**

306 ADR issues should be considered as early in the permitting or design process as
307 possible. Properly timed Level II ADRs are the most efficient use of time and resources.
308 For instance, many discharges already consider many of the requirements of Level II
309 alternative analyses (Section 5.0) while planning for construction of new facilities or
310 upgrades/expansion to existing facilities. Early planning also allows time to develop an
311 optional work plan which clearly defines a scope of work for developing alternatives.
312 The work plan minimizes miscommunication between DWQ staff and applicants and
313 documents decision points critical to the ADR. The work plan may be put out for public
314 comment, at the applicant's discretion, so that stakeholder concerns can be addressed

315 early in the process, which is much easier and less time consuming than addressing
316 concerns at the end of the permitting process. Finally, early notification provides
317 sufficient time for the DWQ and applicants to work together to ensure that sufficient
318 data are available to generate defensible permit limits. The DWQ suggests that
319 whenever possible applicants initiate ADR processes one year or longer prior to the
320 desired date of a permit. The actual time required to complete the ADR is dependent
321 on the complexity of the ADR.

322

323



324

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

326

327 **3.6 Public and Interagency Participation in ADRs**

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

334 *3.6.1 Public Notification Process*

335 Ultimately, the completed ADR and associated documentation will be made available
336 for public comment through the processes required for UPDES permits. However, the
337 applicant may opt for earlier reviews upon completion of a work plan that defines the
338 parameters of concern and the alternatives to be considered for the Level II ADR
339 alternatives analysis. The primary purpose of these optional early reviews is to identify
340 stakeholder project concerns early in the permitting process when the comments can be
341 addressed most efficiently. If an early review is conducted, concerned members of the
342 public should use this work plan comment period to identify general concerns with the
343 proposed activity, additional parameters of concern that warrant consideration, or
344 additional treatment alternatives that should be considered. Figure 2 identifies decision
345 points in the process when DWQ recommends that the applicant solicit optional public
346 comments. DWQ will facilitate any optional public comment opportunities by making
347 the documents available on DWQ's website and the State's Public Notice website.
348 Responding to comments for any optional public comment opportunities is the
349 responsibility of the applicant. DWQ responds to comments for the mandatory public
350 comment period prior to issuing the permit.

351 *3.6.2 Intergovernmental Coordination and Review*

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

356 | **4.0 IDENTIFICATION OF THE PARAMETERS OF CONCERN**

357 Parameters of concern are evaluated in the Level II ADR. Only parameters in the
358 discharge that exceed, or potentially exceed, ambient concentrations in the receiving
359 water should be considered in selecting the parameters of concern.

360 **4.1 Determination of the Parameters of Concern**

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

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

368 Ambient concentrations are determined by DWQ at critical conditions
369 and provided to the applicant. Typically, ambient conditions are based
370 on the most recent 10 years of data. Critical condition for
371 bioaccumulative toxics is considered the 80th percentile concentration
372 and for conventional pollutants and non-bioaccumulative toxics the
373 average concentration. The applicant may elect to collect water quality
374 data to reduce uncertainty and assist DWQ in determining existing
375 ambient concentrations.

376 The effluent concentrations are the permitted effluent limits or discharge
377 concentration of the baseline treatment alternative. For parameters that
378 do not warrant permit effluent limits based on DWQ's reasonable
379 potential analysis, the 80th percentile of the effluent concentrations
380 should be used. If no discharge data is available for the baseline
381 treatment alternative, the concentration should be estimated based on
382 pilot studies, literature values, manufacturers guidelines and/or best
383 professional judgement.

384 In cases when the available data are limited, comparisons between
385 effluent/permitted and ambient concentrations may be conducted using
386 methods that minimize type II errors, *i.e.*, erroneously concluding that a
387 pollutant will not degrade water quality.

- 388 2. Is the parameter already included in an existing permit?
- 389 3. Are parameter concentrations and/or loads exceeding or projected to
390 exceed the current permitted load or design basis?

- 391 4. Are there any parameters that are considered to be important by DWQ
392 or the general public? For instance, nutrients or bioaccumulative
393 compounds may be of concern for some surface waters. For discharges
394 to Class 1C drinking water sources, any substances potentially deleterious
395 to human health may be considered.
- 396 5. Are there parameters in the effluent that are known to potentially
397 degrade the existing beneficial uses of the receiving water?
- 398 6. Is the receiving water listed as impaired for any parameters? Parameters
399 for which the receiving water is listed as impaired and have an ongoing or
400 approved TMDL are not considered as part of the ADR and are addressed
401 through the TMDL program.

402 The applicant, working with DWQ, should review all available data, from the discharge
403 and the receiving water, and prepare a list of parameters which will be evaluated. DWQ
404 will provide any available data from the receiving water to the applicant. The list of
405 parameters of concern and supporting rationale should be submitted to DWQ. DWQ
406 will review the list and provide preliminary approval pending public comment. Meetings
407 between the applicant and DWQ are anticipated to be the most efficient way to resolve
408 differences regarding parameters to be considered in the Level II ADR.

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

415 **4.1 Ranking the Parameters of Concern**

416 The parameters of concern may need to be ranked, or weighted, in order to
417 determine overall water quality degradation of a given treatment alternative. Ranking
418 and weighting factor considerations are provided below. The basis of the ranking
419 should be documented in the ADR application.

- 420 1. For toxic POCs, using the EPA's toxic weighting factors (TWF) to calculate toxic
421 weighted pound equivalents (TWPE) for the POCs may be appropriate. EPA
422 derives TWFs from chronic aquatic life criteria (or toxic effect levels) and
423 human health criteria (or toxic effect levels) established for the consumption
424 of fish in order to account for differences in toxicity across pollutants and to
425 provide the means to compare mass loadings of different pollutants. Other
426 factors may be more appropriate for ranking toxic POCs than TWF on a case-
427 by-case basis depending on site specific considerations such as the available
428 assimilative capacity for each toxicant or downstream impacts associated with
429 a particular toxicant.

- 430
431
432
433
434
435
436
437
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 be developed in consultation with DWQ.
 3. In the case where both toxic and non-toxic POCs are identified, ranking and weighting will be based on best professional judgment based on site specific considerations.

438 | **5.0 ALTERNATIVES ANALYSIS OF LEVEL II ADRS**

439 As the name suggests, the alternatives analysis requires, to the extent feasible,
440 documentation of the costs and water quality benefits of alternative treatment options.
441 The purpose of an alternatives analysis is to evaluate whether there are any reasonable
442 non-degrading or less degrading alternatives for the proposed activity.

443 **5.1 Development of a Scope of Work for Level II ADR Alternatives**
444 **Analysis**

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

447 The first suggested step in the scoping process will be to convene a meeting between
448 the applicant, project consultants, and DWQ to review the requirements found in R317-
449 2-3.5 as shown below:

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

- 452 *(a) innovative or alternative treatment options*
 - 453 *(b) more effective treatment options or higher treatment levels*
 - 454 *(c) connection to other wastewater treatment facilities*
 - 455 *(d) process changes or product or raw material substitution*
 - 456 *(e) seasonal or controlled discharge options to minimize discharging during*
457 *critical water quality periods*
 - 458 *(f) pollutant trading*
 - 459 *(g) water conservation*
 - 460 *(h) water recycle and reuse*
 - 461 *(i) alternative discharge locations or alternative receiving waters*
 - 462 *(j) land application*
 - 463 *(k) total containment*
 - 464 *(l) improved operation and maintenance of existing treatment systems*
 - 465 *(m) other appropriate alternatives...*
- 466

467 *An option more costly than the cheapest alternative may have to be implemented*
468 *if a substantial benefit to the stream can be realized. Alternatives would generally be*
469 *considered feasible where costs are no more than 20% higher than the cost of the*
470 *discharging alternative, and (for POTWs) where the projected per connection service*
471 *fees are not greater than 1.4% of MAGI (median adjusted gross household income),*
472 *the current affordability criterion now being used by the Water Quality Board in the*
473 *wastewater revolving loan program. Alternatives within these cost ranges should be*
474 *carefully considered by the discharger. Where State financing is appropriate, a*
475 *financial assistance package may be influenced by this evaluation, i.e., a less*
476 *polluting alternative may receive a more favorable funding arrangement in order to*
477 *make it a more financially attractive alternative.”*

478 **5.2 Establishing the Baseline Treatment Alternative**

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

484 **5.3 General Considerations for Selecting Treatment Alternatives for**
485 **Consideration**

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

- 490 1. The feasibility of all alternatives should be examined before inclusion in the
491 options to be reviewed. If an option is not feasible, it should not be considered.
492 As an example, before pollutant trading is considered, willing partners in such
493 trading should be identified or the potential for trading should exist.
- 494 2. Innovative or alternative treatment options should be limited to proven or
495 successfully piloted processes.
- 496 3. The treatment options subject to review should focus on those which have the
497 greatest potential for water quality improvement for the parameters of concern.
498 Flexibility to modify the treatment process to address potential future changes in
499 waste streams or treatment requirements should also be considered.
- 500 4. When an instream need for the discharge water is deemed by the Executive
501 Secretary to be of significant importance to the beneficial use (i.e., if removal of
502 the discharge would result in a detrimental loss of stream flow), evaluation of
503 reuse, land disposal or total containment may be unnecessary.
- 504 5. Alternatives may be ranked in order of potential for parameter reduction.
505 Preference should be given to processes that have the greatest overall effect on
506 water quality. Typically, these highest ranked processes will have the greatest
507 reduction in pollutant load and affect the greatest number of parameters of
508 concern.
- 509 6. Before improved operations and maintenance are considered as a way to
510 prevent degradation, specific operation or maintenance activities should be
511 identified. If Executive Secretary and the applicant agree, a third party may be
512 used to assess potential for operations and maintenance improvements.

513 **5.4 Special Project-Specific Scoping Considerations**

514 The number of alternatives to be considered and the extent of planning details for
515 alternative analyses may depend on the nature of the facility, size of the proposed
516 discharge, the magnitude of degradation, and the characteristics of the receiving water.
517 This section outlines screening procedures for determining reasonable alternatives that
518 are appropriately scaled to the proposed project. The alternatives specified here are
519 guidelines and may be modified from public comments or at the Executive Secretary's
520 discretion.

521 All discharges requiring a permit must be provided with a level of treatment equal to
522 or exceeding the requirements in R317-3 for technology based effluent limitations. As
523 provided in R317-2, minimum technology based treatment requirements for POTWs
524 consist of secondary treatment and applicable limitations and standards. The
525 technology based review for POTWs in the Clean Water State Revolving Fund (SRF)
526 process is accomplished through the Facility's Plan and Environmental Assessment. The
527 requirements of the process include an investigation of project need, alternatives,
528 effluent limitations, future conditions, and an Environmental Assessment. The
529 technology based review for POTWs subject to the SRF process generally is satisfied on
530 completion of the Facility Plan, Environmental Assessment, public participation, and
531 DWQ approval. The technology based review for POTWs that are not in the SRF process
532 is conducted through the UPDES permitting process.

533 The technology based review for non-POTW facilities likewise is conducted during the
534 UPDES permitting and technology based requirements are applied when the permit is
535 drafted. DWQ has adopted categorical standards for discharges from various types of
536 industries. Existing industrial discharges are required to achieve the best conventional
537 pollutant control technology for conventional pollutants and the best available
538 technology for nonconventional and toxic pollutants. Certain new industrial discharges
539 are required to comply with new source performance standards based on the best
540 available demonstrated control technology. Effluent limitations for parameters or
541 industries not covered by the categorical standards and limitations are established on a
542 case-by-case basis, based on best professional judgment. The technology review is
543 complete when the Executive Secretary approves the draft permit.

544 If a Level II review was conducted for the facility for a previous renewal and a Level II
545 review is required for permit reissuance, and if the previous Level II review was based
546 on the design basis of the facility, the applicant should include a written statement
547 certifying that: 1) all alternative treatment processes remain applicable and that the
548 applicant is not aware of alternatives that were not previously considered, 2) that
549 reasonable alternative operation and maintenance procedures are not available that
550 would reduce degradation of the receiving water if implemented.

551 **5.5 Finalizing the Alternatives Work Plan**

552 Once a scope of work is agreed to between DWQ and the applicant, the scope of work
553 should be documented in a work plan. The work plan can be made available to the

554 public and can be published on the State Public Notice website at the applicant’s
555 discretion. The scope of work may be modified in response to public comments, at the
556 applicant’s discretion. This public comment period may be held concurrent with the
557 comment period for the parameters of concern, both of which are at the applicant’s
558 discretion.

559 For the optional public comment periods, DWQ can be the recipient of the comments
560 but the applicant has the responsibility of addressing the comments. A comment
561 response document is not required, but DWQ recommends that the applicant respond
562 to the comments in writing. If DWQ is not the recipient of the comments, the applicant
563 should share the comments received with DWQ in a timely manner.

564 Additional alternatives may be identified during the public comment period or during
565 evaluation of the alternatives. These possible changes to the scope to the alternatives
566 analyses should be reviewed by the Applicant and DWQ for inclusion in the work plan as
567 needed.

568 **5.6 Materials to be Submitted with Alternative Analyses**

569 For the DWQ to fairly evaluate alternative treatments, the following information
570 should be provided for each alternative process:

- 571 1. A technical description of the treatment process, including construction costs
572 and continued operation and maintenance expenses.
- 573 2. The mass and concentration of discharge constituents, and a description of the
574 discharge location.
- 575 3. A description of the reliability of the system.
- 576 4. A ranking of each alternative in terms of its relative ability to minimize
577 degradation to the receiving water (see Section 5.6).
- 578 5. A ranking of each alternative as to how adaptable it would be to potentially
579 changing regulatory requirements.

580

581 **5.7 Procedures for Evaluating the Preferred Alternative**

582 *5.7.1 Applicant Ranking of Treatment Alternatives*

583 The alternatives should be ranked from the least-degrading to the most-degrading
584 alternative, as determined from the established and ranked pollutants of concern.
585 Creating a ranked hierarchy of alternatives helps to simplify the applicant’s selection of
586 a “preferred” alternative. By ranking alternatives in this way, the applicant can avoid
587 having to perform a detailed economic analysis on the universe of available alternatives,
588 instead focusing efforts on only the “top” or least-degrading alternative. In a following
589 step the applicant either selects the “top” alternative as the “preferred” alternative or

590 conducts a more detailed review to justify eliminating that alternative from further
 591 consideration (e.g., the option would be too costly).

592 The applicant should identify situations in which different alternatives are more or
 593 less degrading for individual pollutants. In these cases, the applicant should identify and
 594 document its rationale regarding the alternative that – on the whole – is least-
 595 degrading. For example, alternative A might be least-degrading for TDS, but result in a
 596 more degradation than alternative B for selenium. If there were a downstream
 597 impairment for TDS, that might influence a decision that the overall least-degrading
 598 alternative in our example was alternative A. On the other hand, if there was no
 599 impairment downstream and the assimilative capacity reduction for TDS was 10 percent
 600 and the selenium reduction in assimilative capacity was 75 percent, the preferred
 601 alternative might be alternative B.

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

608

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.

609

610

611

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

Ratings:	
Minor Improvement	1

Modest Improvement	2
Reasonable Improvement	3
Good Improvement	4
Excellent Improvement	5

614

615 *5.7.2 Review and Selection of the Preferred Alternative*

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

621 In determining the selected alternative, the following items should be considered and
622 evaluated:

- 623 1. Existing section R-317-2-3.5.c states: "An option more costly than the cheapest
624 alternative may have to be implemented if a substantial benefit to the stream
625 can be realized. Alternatives would generally be considered feasible where costs
626 are no more than 20% higher than the cost of the discharging alternative, and
627 (for POTWs) where the projected per connection service fees are not greater
628 than 1.4% of MAGI (median adjusted gross household income), the current
629 affordability criterion now being used by the Water Quality Board in the
630 wastewater revolving loan program. Alternatives within these cost ranges should
631 be carefully considered by the discharger. Where State financing is appropriate,
632 a financial assistance package may be influenced by this evaluation, i.e., a less
633 polluting alternative may receive a more favorable funding arrangement in order
634 to make it a more financially attractive alternative."
- 635 2. Alternative Operations and Maintenance (O&M) scenarios should be considered
636 in the ranking process. An Alternative O&M scenario will generally be considered
637 feasible if the annual cost increase is no more than 10% of the annual operating
638 cost or 20% of the 20-year present worth, whichever is less.
- 639 3. In considering alternatives, the review should consider the current zoning
640 requirement surrounding the facility being evaluated.
- 641 4. When different alternatives have similar potential to reduce degradation of
642 water quality, other ancillary water quality benefits should be considered such as
643 maintenance or enhancement of instream flow or habitat.
- 644 5. Optional mitigation projects may also be included with any selected alternative
645 when it is deemed to be cost effective and environmentally beneficial. If the
646 discharger includes a mitigation project with an alternative, consideration should
647 be given to the expected net benefits to water quality of both the discharge and
648 mitigations when ranking project alternatives.

649 6. The review of the selected alternative should also include factors such as
650 reliability, maintainability, operability, sustainability, and adaptability to
651 potentially changing discharge requirements.

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

654 *5.7.3 Opportunity for Public Comment and Review of the Preferred Alternative*

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

659

660 | **6.0 IMPLEMENTATION PROCEDURES FOR DEVELOPMENT OF A**
661 **STATEMENT OF SOCIAL, ENVIRONMENTAL, AND ECONOMIC**
662 **IMPORTANCE (SEEI)**

663 Beyond the alternatives analysis, the second key component of a Level II ADR is a
664 Statement of Social, Environmental, and Economic Importance (SEEI). The SEEI
665 evaluates the societal benefits of the proposed activity by documenting factors such as:
666 employment, production, tax revenues, housing, and correction of other societal
667 concerns (i.e., health or environmental concerns). This portion of the ADR provides the
668 project proponent the opportunity to document that the overall benefits of the project
669 outweigh any negative consequences to water quality. As a result, the project
670 proponent is best served by making this portion of the ADR as thorough as possible. At
671 a minimum this portion of the review should contain the following:

- 672 1. A description of the communities directly affected by the proposed project,
673 including factors such as: rate of employment, personal or household
674 income, poverty level, population trends, increasing production, community
675 tax base, etc.
- 676 2. An estimate of important social and economic benefits that would be
677 realized by the project, including the number and nature of jobs created and
678 projected tax revenues generated.
- 679 3. An estimate of any social and economic costs of the project, including any
680 impacts on commercial or recreational uses.
- 681 4. A description of environmental benefits of the project and associated
682 mitigation efforts (if any). For instance, if a project would result in an
683 increase in stream flow that would provide additional habitat and a net
684 benefit to stream biota, this benefit would be documented in this section of
685 the review.
- 686 5. Documentation of local government support.

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

692

693 **6.1 Regulatory Framework**

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

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

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

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

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

708 *(b) increased production;*

709 *(c) improved community tax base;*

710 *(d) housing;*

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

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

714

715

716

717 **6.2 Important Considerations in developing SEEs**

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

725 The SEEI is about demonstrating that the degradation will support important social
726 and economic development in the local area. The SEEI is not about the economic
727 benefits to an individual or corporation. Instead, the SEEI is intended to support an
728 informed public discussion and decision about the pros and cons of allowing water
729 quality degradation. If the lowering of water quality resulting from the preferred
730 alternative is not in the overriding public interest, then a less-degrading alternative must
731 be selected or the permit may be denied. If the lowering of water quality is found to be
732 in the overriding public interest, this finding is documented and submitted for public
733 comment along with the draft permit incorporating the preferred alternative.

734 *6.2.1 Effects on Public Need/Social Services*

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

739 *6.2.2 Effects on Public Health/Safety*

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

748 *6.2.3. Effect on Quality of Life*

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

752 *6.2.4. Effect on Employment*

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

755 the proposed project. Will the proposed project improve employment or mean
756 household income in the affected area?

757 *6.2.5 Effect on Tax Revenues*

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

762 *6.2.6 Effect on Tourism*

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

766 *6.2.7 Preservation of assimilative capacity*

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

772 *6.2.8 Other Factors*

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

776 **6.3 Review and Approval of SEEs**

777 The Executive Secretary will generally consider public projects to be necessary to
778 accommodate social and economic growth unless compelling information exists to the
779 contrary. DWQ may consult with local and State planning and zoning agencies to
780 determine whether or not the project is consistent with the long-term plans of affected
781 communities. Information obtained from local planning groups may be compiled with
782 other material obtained through the ADR process. The Executive Secretary will make a
783 determination. Appeals to the Executive Secretary's decision may be made consistent
784 with the procedures for administrative appeals.

785 *6.3.1 Threshold for Defining Important Activity*

786 Important social, economic or environmental activity refers to an activity that is in the
787 overriding public interest. The word important is relative to the community in which the
788 discharge is located; therefore, no uniform threshold has been defined for determining
789 whether an activity is important. The term important is intended to convey a general
790 concept regarding the level of social and economic development used to justify a
791 change in high quality waters. The relative magnitudes of indicators, such as decreases

792 in unemployment, gains to the local economy, changes in household income, changes in
793 tax revenues, and indirect effects on businesses should be taken into consideration.

794 A cost-benefit analysis which shows that the economic benefits of the activity exceed
795 the economic costs of the water quality degradation can be used as a metric to
796 demonstrate importance.

797

798 **6.4 Public Comment Procedures**

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

805

806 **7.0 SPECIAL PERMIT CONSIDERATIONS**

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

812 **7.1 Individual Stormwater Permits**

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

816 **7.2 General Permits**

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

- 819 • Animal Feeding Operations (AFOs),
- 820 • Construction dewatering or hydrostatic testing,
- 821 • Municipal stormwater,
- 822 • Industrial stormwater,
- 823 • Drinking water treatment plants,
- 824 • Private on-site wastewater treatment systems,
- 825 • Construction sites one acre or larger,
- 826 • Coal mining operations and,
- 827 • Discharge of treated groundwater.
- 828

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

835 **7.3 §401 Certifications**

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

842 Section 73-3-29 of the Utah Code requires any person, governmental agency, or other
843 organization wishing to alter the bed or banks of a natural stream to obtain written

844 authorization from the State Engineer prior to beginning work. The Stream Alteration
845 Program was implemented in 1972 in order to protect the natural resource value of the
846 state's streams and protect the water rights and recreational opportunities associated
847 with them. In 1988, the U.S. Army Corps of Engineers issued Regional General Permit 40
848 (GP-40) which allows an applicant to obtain both state approval and authorization under
849 Section 404 of the Clean Water Act through a single application process. Although not all
850 stream alteration activities qualify for approval under GP-40, many minimal impact
851 projects can be approved under this joint permit agreement.

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

855 **8.0 ISSUES FOR FUTURE ITERATIONS OF THE IMPLEMENTATION** 856 **GUIDANCE**

857 As discussed in Section 1.0, the initial versions of this guidance focus on UPDES
858 permits with the exception of general permits. For the topics listed below in Section
859 7.1, the guidance is incomplete. The existing guidance provided for these topics
860 represents DWQ's current thinking but is incomplete and should be applied with
861 caution. For activities requiring ADRs, but not yet completely addressed in guidance, the
862 permittee should consult DWQ for assistance. These ADRs will be conducted on a case-
863 by-case basis consistent with the requirements of R317-2-3.

864 **8.1 Planned Future Additions to the Guidance**

- 865 1. Glossary. A glossary of that defines important terms used in the guidance will be added
866 to future iterations.
- 867 2. Acronym Key. A key that identifies the acronyms used in the guidance will be added to
868 future iterations.
- 869 3. References. References will be added to future iterations of the guidance.
- 870 4. Temporary and Limited. Guidance on how to determine if a discharge qualifies as
871 temporary and limited will be added to future iterations.
- 872 5. General permits and 401 Certifications. General Permits that are subject to ADR
873 requirements include:
874 Animal Feeding Operations (AFOs),
875 Construction dewatering or hydrostatic testing,
876 Municipal stormwater,
877 Industrial stormwater,
878 Drinking water treatment plants, Private on-site wastewater treatment systems
879 Stream alteration permits,
880 Construction sites one acre or larger,
881 Coal mining operations and,
882 Discharge of treated groundwater.