

**VERMONT AGENCY OF NATURAL RESOURCES  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
INTERIM ANTI-DEGRADATION IMPLEMENTATION PROCEDURE**

**I. Authority and Purpose**

- A. Section 1-03, Anti-degradation Policy, of the Vermont Water Quality Standards is required pursuant to the federal Clean Water Act (40 C.F.R. 131.12) and is adopted under the authority of 10 V.S.A. Chapter 47. The primary goal of the Policy is the maintenance and protection of water quality, and existing and designated uses. The Policy consists of three main elements:
1. Protection of water quality in outstanding resource waters (“Tier 3”).
  2. Protection and maintenance of water quality in high quality waters (“Tier 2”); and
  3. Determination and protection of existing uses (“Tier 1”).
- B. Pursuant to 40 C.F.R. 131.12(a) a state must develop and adopt a statewide anti-degradation policy and identify the methods for implementing the policy. The Vermont Legislature has required through statute that the Agency promulgate an anti-degradation rule to identify how the Agency will implement the Policy. Through separate statute, the Legislature has directed that this rulemaking may not commence until at least January 2011. Since rulemaking typically takes at least one year, the Secretary has determined that this Procedure is needed to assist implementation of the Policy during the interim period prior to formal adoption of an anti-degradation rule. This Interim Anti-Degradation Implementation Procedure describes the methods that the Agency will use to implement the Policy during this interim period. This Procedure will expire upon the effective date of an Agency anti-degradation rule.

**II. Definitions**

- A. As used in this Procedure, the following terms shall have the specified meaning. If a term is not defined, it shall have the meaning specified in the Vermont Water Quality Standards or, in the absence of a definition in the Standards, it shall have its common meaning.
1. “Agency” means the Vermont Agency of Natural Resources.
  2. “Application” means any request for a permit required by state or federal law when filed with, and deemed complete, by the reviewing authority.

3. "Assimilative capacity" means a measure of the capacity of the receiving waters to assimilate wastes without lowering their quality below the applicable water quality criteria.
4. "Cumulative impact" means the impact on the receiving water that results from the incremental impact of a discharge when added to other past and present legal discharges. Cumulative impacts may result from individually minor but collectively significant actions taking place over a period of time.
5. "Designated use" means any value or use, whether presently occurring or not that is specified in the management objectives for each class of water as set forth in §§ 3-02(A), 3-03(A), and 3-04(A) of the Vermont Water Quality Standards.
6. "Discharge" means the placing, depositing, or emissions of wastes, directly or indirectly, into an injection well or into waters.
7. "Equilibrium conditions" represents a balance between the water flow, sediment and woody debris supplied to the stream system, and the stream capacity to transport the sediment and debris loads. Equilibrium exists when the stream maintains its dimension, pattern, and profile without unnaturally aggrading or degrading at the river reach or valley segment scales.
8. "Existing discharge" means any discharge to the extent authorized by a valid permit issued under the provisions of 10 V.S.A. §1263 or §1265 as of January 7, 1988.
9. "Existing use" means a use which has actually occurred on or after November 28, 1975, in or on waters, whether or not the use is included in the standard for classification of the waters, and whether or not the use is presently occurring.
10. "High quality waters" means those waters defined as high quality by the Secretary as specified in this Procedure.
11. "New discharge" means any discharge not authorized under the provisions of 10 V.S.A. §1263 as of January 7, 1985 or any increased pollutant loading or demand on the assimilative capacity of the receiving waters from an existing discharge that requires the issuance of a new or amended permit.
12. "NPDES" means the National Pollutant Discharge Elimination System Program established by the federal Clean Water Act to permit certain discharges of pollutants to surface waters.

13. "Outstanding Resource Waters" means those waters designated pursuant to 10 V.S.A. §1424a.
14. "Permit" means a certification, dam order, or other authorization in which during the application review process, compliance with the Vermont Water Quality Standards is evaluated pursuant to applicable state or federal law.
15. "Policy" means Vermont's anti-degradation policy set forth in §1-03 of the Vermont Water Quality Standards.
16. "Parameter" means a chemical, physical, or biological attribute that is used to assess conditions and which is contained as narrative or numeric criteria in Vermont's Water Quality Standards.
17. "Run-of-river" means flow downstream from a project or activity that is equal to inflow on an instantaneous basis. The project or activity does not operate out of storage and, therefore, does not artificially regulate flows downstream.
18. "Secretary" means the Secretary of the Vermont Agency of Natural Resources or the Secretary's duly authorized representative.
19. "Standards" means the Vermont Water Quality Standards adopted by the Vermont Natural Resources Panel, as they may be amended from time to time.
20. "Waste" means effluent, sewage, or any substance or material, liquid, gaseous, solid or radioactive, including heated liquids, whether or not harmful or deleterious to waters; provided however, the term "sewage" as used in 10 V.S.A. Chapter 47 shall not include the rinse or process water from a cheese manufacturing process.

### **III. Applicability**

- A. The Secretary will apply the Policy and this Procedure during the review of applications for any permit for a new discharge if during the application review process compliance with the Standards is evaluated pursuant to applicable state or federal law. Discharges that do not require a permit are not subject to this Procedure.
- B. Applications for the following permits are subject to review under this Procedure:
  1. individual and general NPDES direct discharge permits issued pursuant to 10 V.S.A. §1263 and the Vermont Water Pollution Control Regulations;

2. permits for new indirect discharges issued pursuant to 10 V.S.A. §1263. For purposes of this subsection, a "new indirect discharge" means a discharge that was not in existence as of May 17, 1986 or a discharge that existed on or prior to May 17, 1986 but has subsequently been increased.
3. individual and general Water Quality Certifications required by Section 401 of the federal Clean Water Act for a federal license or permit for flow modifying activities (e.g. hydro projects);
4. dam orders issued pursuant to 10 V.S.A. Chapter 43;
5. individual and general NPDES stormwater permits and state stormwater permits issued pursuant to §§1264 04 1264a;
6. individual and general Water Quality Certifications required by Section 401 of the federal Clean Water Act for a federal license or permit for shoreland encroachments, stream alterations and activities in wetlands; and
7. groundwater withdrawal permits issued pursuant to 10 V.S.A. §1418.

C. Applications for the following permits are exempt from review under the Policy and this Procedure :

1. permits for response actions taken pursuant to 10 V.S.A. §§ 1283, 1941, 6615, or 6615b or 10 V.S.A. Chapter 159, Subchapter 3 taken in response to a release of hazardous materials which may be hazardous to human health or which caused an existing water quality impairment;
2. permits for discharges from wastewater treatment facilities that are designed to eliminate unpermitted discharges that pose a threat to public health, or which caused an existing water quality impairment;
3. permits for stormwater remediation projects installed to mitigate the impact of existing stormwater discharges to receiving waters;
4. permits for new indirect discharges subject to the Agency's indirect discharge program; and
5. dam permits issued for ordinary repairs or dam permits that authorize actions necessary to abate a threat to human life or property.

D. In reviewing an application for a new discharge, the Secretary shall determine whether the proposed discharge is consistent with the Policy and this Procedure by utilizing all credible and relevant information and the best professional judgment of Agency staff.

#### **IV. Information Required from Applicant**

- A. The Secretary may request that an applicant provide the following information, as appropriate:
1. description of the proposed activity, discharge and facility operations, including specific locations;
  2. physical, chemical and biological data for the receiving waters and the characteristics of any proposed discharge;
  3. water quality modeling analyses;
  4. social and economic data and analyses.
- B. The Secretary may also require the applicant to provide information regarding:
1. the presence of existing uses;
  2. the level of water quality necessary to maintain and protect existing and designated uses;
  3. the potential impacts on existing uses and high quality water due to the proposed discharge;
  4. the cumulative impacts associated with a proposed discharge;
  5. existing and designated uses and credible and relevant information that the level of water quality necessary to protect those uses will be maintained and protected.
  6. the magnitude, duration, and extent of any lowering of high quality water due to the proposed discharge by itself and in combination with other presently occurring legal discharges; and
  7. if a proposed lowering of water quality is justified under the socioeconomic justification test in the Policy.
- C. When the Secretary determines that the information provided by the applicant is insufficient to evaluate a proposed discharge under the Policy and this Procedure, the Secretary shall require additional information from the applicant. An applicant's failure to provide the required information shall result in denial of the application.
- D. All technical, scientific, social, and economic data and analyses provided to the Secretary shall be developed by qualified professionals.

## **V. Public Participation Requirements**

- A. The Secretary shall assure that public participation is provided for all actions for which a review for consistency with the Policy is conducted. The public process will be conducted in accordance with the public notice and hearing requirements for the individual and general permits, and authorizations under a general permit, under consideration. The fact sheet, if any, and the public notice for the individual or general permit, or authorization under a general permit, shall include a statement that the permitted action complies with the Policy and shall describe how the public can obtain copies of materials prepared in support of the anti-degradation review.

## **VI. Evaluation of Applications - Structure of Procedure Based on Permit Type**

- A. The Secretary will apply this Procedure during the review of applications for any permit for a new discharge in which during the application review process compliance with the Standards is evaluated. Since multiple Divisions within the Department, and multiple programs within these Divisions, will apply this Procedure in the evaluation of permit applications, the following Sections describing the anti-degradation analysis are organized based on permit type.

## **VII. Direct Discharge Permits Issued under 10 V.S.A. §1263**

### **A. Applicability**

1. A discharge subject to an individual or general NPDES direct discharge permit issued pursuant to 10 V.S.A. §1263 , excluding thermal discharges, shall be reviewed under paragraphs B. through F. of this Section. Thermal discharges shall be reviewed under paragraph G. of this Section VII.

### **B. Review of Permits**

1. For individual permits, the Secretary will apply the Policy and this Procedure at the time when an application for an individual permit is reviewed.
2. For general permits, the Secretary will apply the Policy and this Procedure at the time when a general permit is developed. A general permit shall include a discussion of how the Policy and this Procedure were considered and applied in the issuance of the general permit.

### **C. Presumptions**

1. Based on credible and relevant information, the nature of the discharge, and the applicable treatment and control standards required by law for the discharge and the best professional judgment of Agency staff, the

Secretary has determined that the following discharges are not subject to a Tier 2 review under the Policy:

- (a) That portion of a discharge that consists of a specific pollutant when such pollutant is not capable of being detected in the applicable receiving water; or
  - (b) A discharge that is seeking authorization to operate under a general permit when the Tier 2 analysis is performed at the time of the development of the general permit.
2. The presumption in D.1(b) above may be rebutted on a case-by-case basis if warranted by credible and relevant information available to the Secretary during his/her review of an application to operate under a general permit.

#### D. Tier 3 - Protection of Outstanding Resource Waters

- 1. Under 10 V.S.A. §1424a, the Vermont Water Resources Panel may designate waters as Outstanding Resources Waters if it finds that the waters have exceptional natural, recreational, cultural or scenic values. Section 1-03 (D) of the Standards provides that where the Panel designates Outstanding Resource Waters "because of their water quality values, their existing high quality shall be protected and maintained."
- 2. An evaluation of the potential impacts of a discharge to water quality values identified by an Outstanding Water Resources designation shall only be considered if:
  - (a) the proposed discharge will improve water quality or is necessary for the maintenance of current environmental conditions; or
  - (b) the proposed discharge is temporary and it is expected that water quality in the receiving water will be equal to or better than that which existed prior to commencement of the discharge. In order to be considered temporary, the duration of the discharge must typically occur over a period of days or months, not years.

#### E. Tier 2 - Protection of High Quality Waters

- 1. Determination of High Quality Waters:
  - (a) Waters whose existing ambient water quality exceeds (i.e. is better than) the applicable minimum water quality criteria and indices for the class to which the waterbody is assigned shall be considered high quality water.

- (b) A waterbody will be assessed as high quality on a parameter by parameter basis, specific to its designated use. A waterbody may not meet water quality criteria for all parameters, yet be considered high quality for other parameters for which the related use is supported.
- (c) The Secretary will presume that all waters are high quality for at least one criterion and/or index for some portion of the year. This presumption may be rebutted by credible and relevant information obtained by or provided to the Secretary.

## 2. Determination of Reduction of Water Quality

- (a) Section 1-03 of the Standards provides that a limited reduction in the existing higher quality of high quality waters may be allowed only when the socioeconomic justification test set forth in the Policy is met.
- (b) In the course of reviewing an application under the Policy and this Procedure, the Secretary shall determine whether the proposed discharge will result in a limited reduction in water quality in a high quality water by utilizing all credible and relevant information and the best professional judgment of Agency staff.
- (c) If the Secretary determines that a proposed discharge will result in a reduction in water quality, the Secretary shall not issue a permit or approval unless the Secretary finds that allowing a limited reduction in water quality satisfies the socioeconomic justification test in the Policy.
- (d) For discharges subject to this Part, the Secretary may consider, when appropriate, one or more of the following factors when determining if a proposed new discharge will result in a reduction in water quality:
  - i. the predicted change, if any, in ambient water quality criteria at the appropriate critical conditions;
  - ii. whether there is a change in total pollutant loadings;
  - iii. whether there is a reduction in available assimilative capacity;
  - iv. the nature, persistence and potential effects of the pollutant;
  - v. the ratio of stream flow to discharge flow (dilution ratio);



- vi. the duration of the discharge;
- vii. whether there are impacts to aquatic biota or habitat that are capable of being detected in the applicable receiving water; and

the existing physical, chemical and biological data for the receiving water.

(e) Assessment of Cumulative Impacts. Any evaluation of whether a proposed discharge will result in a lowering of water quality shall include a consideration of cumulative impacts. Examples of factors that may be considered, include but are not limited to:

- i. classification and fishery designation of the receiving water;
- ii. existing physical, chemical, and biological data for the receiving water;
- iii. current authorized discharges in the affected receiving water;
- iv. effect of the proposed discharge on water quality, including but not limited to assimilative capacity, physical and chemical constituents; and
- v. impact of the proposed discharge on aquatic biota and aquatic habitat.

### 3. Socio-Economic Justification Test

(a) The Policy provides that a limited reduction in the existing higher quality of high quality waters may be allowed only when it is shown that:

- i. the adverse economic or social impacts on the people of the state specifically resulting from the maintenance of the higher quality waters would be substantial and widespread;
- ii. these adverse impacts would exceed the environmental, economic, social and other benefits of maintaining the higher water quality; and
- iii. there shall be achieved the highest statutory and regulatory requirements for all new or existing point sources, and all cost effective and reasonable accepted agricultural practices

and best management practices, as appropriate for nonpoint source control, consistent with state law.

- (b) To the extent any reduction in the quality of high quality waters is allowed, such reduction shall be limited to that which is necessary to comply with Subsection 3(a) above.
- (c) Examples of factors that may be considered, as appropriate, include but are not limited to:
  - i. measurable changes in economic and social conditions, specifically tax base, number and types of jobs created or impacted;
  - ii. measurable direct and indirect economic benefits;
  - iii. correction of an environmental, public health, or public safety problem;
  - iv. environmental, economic, and other benefits of maintaining the higher water quality;
  - v. the loss or reduction of aquatic biota, aquatic habitat, and recreational value that may result from lower water quality;
  - vi. information provided from other government agencies and public participation; and
  - vii. public use or accessibility of a resource.
- (d) An applicant may propose mitigating measures that reduce the impact of the proposed lowering of water quality and which may also increase the economic and social benefits to be considered in this analysis.
- (e) Upon completion of this Analysis, the Secretary shall either:
  - i. Issue a draft discharge permit if the results of this Analysis indicates that a lowering of water quality is justified; or
  - ii. Issue a proposed denial of the application if this Analysis indicates that the lowering of water quality is not justified.

#### F. Tier 1 – Protection of Existing Uses

- 1. The existing uses of waters, and the level of water quality necessary to protect those existing uses, shall be maintained and protected. Existing uses are a confirmation of the set of designated uses in the Standards regardless of the classification of the water.

2. In making a determination of existing uses to be protected and maintained under the Policy, the Secretary shall consider at least the following factors:
  - (a) Aquatic biota and wildlife that utilize or are present in the waters;
  - (b) Habitat that supports existing aquatic biota, wildlife; or plant life;
  - (c) The use of the waters for recreation or fishing;
  - (d) The use of the water for water supply, or commercial activity that depends directly on the preservation of an existing high level of water quality; and
  - (e) With regard to the factors considered under paragraphs 2(a) and 2(b) above, evidence of the uses' ecological significance in the functioning of the ecosystem or evidence of the uses' rarity.
3. In identifying existing uses, the Secretary will:
  - (a) for contact and non-contact recreation, fishing and public surface water supplies consider the information that the applicant submitted in accordance with the *Agency's Process for Determining Recreational Uses*; information gathered in accordance with the *DEC 2008 Basin Planning Procedure for Determination of Existing Uses* during the development of basin plans; any relevant information from an applicable basin plan; and any other relevant information regarding use of the receiving waters for contact and non-contact recreation, fishing and public surface water supplies; and
  - (b) for all other uses, including but not limited to, aquatic habitat, biota, and wildlife, presume that if the designated uses of the receiving waters are currently being achieved and will continue to be achieved after evaluation of the proposed activity, then any identified existing uses will also be maintained and protected.
4. If an existing use is identified that requires more stringent water quality conditions than those set forth in the classification of the receiving water, any permit issued by the Secretary must ensure the maintenance of water quality necessary to protect that existing use.

#### G. Thermal Discharges

1. Any thermal discharge that meets the water quality criteria for temperature at the end of a 200 foot mixing zone shall be deemed to comply with the Policy for Tiers 2 and 1, unless there are site conditions

or existing uses which require additional analysis or the Secretary is aware of or presented with credible and relevant information regarding a potential limited reduction of water quality.

2. The NPDES permit conditions which focus on the thermal component of the discharge must take into account the interaction of the thermal component of the discharge with other pollutants or wastes and whether the change in temperature or rate of change in temperature will result in thermal shock or prevent the full support of existing and designated uses in the receiving waters.
3. Tier 3. A Tier 3 review of a proposed thermal discharge shall be conducted in accordance with section VII.D. above.
4. Tier 2. A Tier 2 review of a proposed thermal discharge shall be conducted in accordance with section VII.E. above, except that Tier 2 is not applicable to the §316(a) CWA analysis. (Tier 2 review is applicable to any permit application which requires a CWA 316(b) analysis).
5. Tier 1 -Thermal Discharge Variance. The anti-degradation evaluation of any thermal discharge with a mixing zone of more than 200 feet in accordance with Standards § 3-01 B.1.d. shall be consistent with the applicable federal regulations and Section 316 of the Federal Clean Water Act. The thermal discharge must assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on the receiving body of water.

**VIII. Discharges Subject to Water Quality Certifications Issued Pursuant to Section 401 of the federal Clean Water Act for Flow Modifying Activities and Discharges subject to a Dam order Under 10 V.S.A. Chapter 43.**

A. Applicability

The following discharges shall be reviewed under this Part:

1. A discharge requiring coverage under an individual or general Water Quality Certification required by Section 401 of the federal Clean Water Act for a federal license or permit for flow modifying activities (e.g. hydro projects);
2. A discharge subject to a dam order under 10 V.S.A. Chapter 43.

B. Review of Applications

1. The Secretary will apply the Policy and this Procedure at the time that an application for a dam order is reviewed or at the time that a 401 certification is prepared.

### C. Presumptions

1. Based on credible and relevant information, the nature of the discharge, and the applicable design, treatment and control standards required by law for the discharge and the best professional judgment of Agency staff, the Secretary has determined that the following discharges automatically satisfy Tier 2 review under the Policy:
  - (a) A discharge that results in no measurable reduction in the physical, chemical or biological quality of a surface water; or
  - (b) Flow modifying activities that meet one or more of the following criteria that are applicable:
    - i. no impoundment or none that would alter the riverine characteristics of the aquatic habitat; and
    - ii. bypass flows that meet or exceed U.S. Fish and Wildlife seasonal conservation flows (0.5/1.0/4.0); and
    - iii. instantaneous run-of-river mode of operation; or
    - iv. water withdrawals that qualify as de minimis under the Agency Procedure for Determining Acceptable Minimum Streamflows; or
    - v. Snowmaking water withdrawals that meet the general standard in Section 16-03(2) or the de minimis standard in Section 16-06(5) in the ANR Environmental Protection Rules – Chapter 16: Water Withdrawals for Snowmaking.
2. The presumptions in C.1(b) above may be rebutted on a case-by-case basis if warranted by credible and relevant information available to the Secretary during his/her review of an application for a proposed discharge.

### D. Tier 3 - Protection of Outstanding Resource Waters

1. Under 10 V.S.A. §1424a, the Vermont Water Resources Panel may designate waters as Outstanding Resources Waters if it finds that the

waters have exceptional natural, recreational, cultural or scenic values. Section 1-03 (D) of the Standards provides that where the Panel designates Outstanding Resource Waters "because of their water quality values, their existing high quality shall be protected and maintained."

2. An evaluation of the potential impacts of a discharge to water quality values identified by an Outstanding Water Resources designation shall only be considered if:
  - (a) the proposed discharge will improve water quality or is necessary for the maintenance of current environmental conditions; or
  - (b) the proposed discharge is temporary and it is expected that water quality in the receiving water will be equal to or better than that which existed prior to commencement of the discharge. In order to be considered temporary, the duration of the discharge must typically occur over a period of days or months, not years.

#### E. Tier 2 - Protection of High Quality Waters

##### 1. Determination of High Quality Waters:

- (a) Waters whose existing ambient water quality exceeds (i.e. is better than) the applicable minimum water quality criteria and indices for the class to which the waterbody is assigned shall be considered high quality water.
- (b) A waterbody will be assessed as high quality on a parameter by parameter basis, specific to its designated use. A waterbody may not meet water quality criteria for all parameters, yet be considered high quality for other parameters for which the related use is supported.
- (c) The Secretary will presume that all waters are high quality for at least one criterion and/or index for some portion of the year. This presumption may be rebutted by credible and relevant information obtained by or provided to the Secretary.

##### 2. Determination of Reduction of Water Quality

- (a) Section 1-03 of the Standards provides that a limited reduction in the existing higher quality of high quality waters may be allowed only when the socioeconomic justification test set forth in the Policy is met.

- (b) In the course of reviewing an application under the Policy and this Procedure, the Secretary shall determine whether the proposed discharge will result in a limited reduction in water quality in a high quality water by utilizing all credible and relevant information and the best professional judgment of Agency staff.
- (c) If the Secretary determines that a proposed discharge will result in a reduction in water quality, the Secretary shall not issue a permit or approval unless the Secretary finds that allowing a limited reduction in water quality satisfies the socioeconomic justification test in the Policy.
- (d) For discharges subject to this Part, the Secretary may consider, when appropriate, one or more of the following factors when determining if a proposed new discharge will result in a reduction in water quality:
  - i. the predicted change, if any, in ambient water quality criteria at the appropriate critical conditions;
  - ii. whether there is a change in total pollutant loadings;
  - iii. whether there is a reduction in available assimilative capacity;
  - iv. the nature, persistence and potential effects of the pollutant;
  - v. the ratio of stream flow to discharge flow (dilution ratio);
  - vi. the duration of the discharge;
  - vii. whether there are impacts to aquatic biota or habitat that are capable of being detected in the applicable receiving water;
  - viii. the existing physical, chemical and biological data for the receiving water;
  - ix. degree of hydrologic or sediment regime modifications;  
and
  - x. any other flow modifications.
- (e) Assessment of Cumulative Impacts. Any evaluation of whether a discharge subject to this Part will result in a lowering of water quality shall include a consideration of cumulative impacts.

Examples of factors that may be considered, as appropriate, include but are not limited to:

- i. Nature of resource impacted – e.g. stream, lake, river,;
- ii. Existing physical, chemical and biological data for the receiving water;
- iii. Current authorized activities and discharges in the affected receiving water;
- iv. Effect of the proposed activity or discharge on water quality, including but not limited to assimilative capacity, physical and chemical constituents;
- v. Stream equilibrium condition, including geomorphic condition, channel adjustment processes, and sensitivity, at the reach and valley segment scales;
- vi. Degree of flow or water level regulation;
- vii. ; and
- viii. Impact of the proposed discharge on aquatic biota and aquatic habitat.

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#### 4. Socio-Economic Justification Test

(a) The Policy provides that a limited reduction in the existing higher quality of high quality waters may be allowed only when it is shown that:

- i. the adverse economic or social impacts on the people of the state specifically resulting from the maintenance of the higher quality waters would be substantial and widespread;
- ii. these adverse impacts would exceed the environmental, economic, social and other benefits of maintaining the higher water quality; and
- iii. there shall be achieved the highest statutory and regulatory requirements for all new or existing point sources, and all cost effective and reasonable accepted agricultural practices and best management practices, as appropriate for nonpoint source control, consistent with state law.



- (b) To the extent any reduction in the quality of high quality waters is allowed, such reduction shall be limited to that which is necessary to comply with Subsection 4(a) above.
- (c) In conducting the Policy's socioeconomic justification test, the Secretary will utilize all credible and relevant information and the best professional judgment of Agency staff. Examples of factors that may be considered, as appropriate, include but are not limited to:
  - i. measurable changes in economic and social conditions, specifically tax base, number and types of jobs created or impacted;
  - ii. measurable direct and indirect economic benefits;
  - iii. correction of an environmental, public health, or public safety problem;
  - iv. environmental, economic, and other benefits of maintaining the higher water quality;
  - v. the loss or reduction of aquatic biota, aquatic habitat, and recreational value that may result from lower water quality;
  - vi. information provided from other government agencies and public participation; and
  - vii. public use or accessibility of a resource.
- (d) An applicant may propose mitigating measures that reduce the impact of the proposed lowering of water quality and which may also increase the economic and social benefits to be considered in this analysis.

#### F. Tier 1 – Protection of Existing Uses

1. The existing uses of waters, and the level of water quality necessary to protect those existing uses, shall be maintained and protected. Existing uses are a confirmation of the set of designated uses in the Standards regardless of the classification of the water.
2. In making a determination of existing uses to be protected and maintained under the Policy, the Secretary shall consider at least the following factors:
  - (a) Aquatic biota and wildlife that utilize or are present in the waters;

- (b) Habitat that supports existing aquatic biota, wildlife; or plant life;
  - (c) The use of the waters for recreation or fishing;
  - (d) The use of the water for water supply, or commercial activity that depends directly on the preservation of an existing high level of water quality; and
  - (e) With regard to the factors considered under paragraphs 2(a) and 2(b) above, evidence of the uses' ecological significance in the functioning of the ecosystem or evidence of the uses' rarity.
3. In identifying existing uses, the Secretary will:
- (a) for contact and non-contact recreation, fishing and public surface water supplies consider the information that the applicant submitted in accordance with the *Agency's Process for Determining Recreational Uses*; information gathered in accordance with the *DEC 2008 Basin Planning Procedure for Determination of Existing Uses* during the development of basin plans; any relevant information from an applicable basin plan; and any other relevant information regarding use of the receiving waters for contact and non-contact recreation, fishing and public surface water supplies; and
  - (b) for all other uses, including but not limited to, aquatic habitat, biota, and wildlife, presume that if the designated uses of the receiving waters are currently being achieved and will continue to be achieved after evaluation of the proposed activity, then any identified existing uses will also be maintained and protected.
4. If an existing use is identified that requires more stringent water quality conditions than those set forth in the classification of the receiving water, any permit issued by the Secretary must ensure the maintenance of water quality necessary to protect that existing use.

## **IX. Discharges Subject to NPDES and State Stormwater Discharge Permits**

### **A. Applicability**

1. A discharge requiring coverage under an individual or general NPDES stormwater permit or state stormwater permit shall be reviewed under this Section IX.

### **B. Review of Applications for Individual Permit Coverage**

1. In order to increase the predictability and efficiency of its permitting programs and to protect the water quality of high quality waters, the Secretary reserves the right to develop manuals of best management practices or other treatment and control requirements for discharges subject to anti-degradation review. The selection of best management practices or other treatment or control requirements in these manuals may take into account anti-degradation requirements and may include consideration of the socioeconomic effects of requiring certain BMPs or other treatment or control requirements. If a manual takes into account anti-degradation requirements, including a consideration of the socioeconomic effects of requiring certain BMPs or treatment and control requirements, then a permittee implementing such identified BMPs or other treatment and control requirements through an individual permit shall be presumed to meet the Policy absent credible and relevant project or site-specific information rebutting the presumption.
2. The Secretary will apply the Policy and this Procedure in reviewing applications for individual permits subject to this Part.
3. At the time of issuance of a draft individual permit and in any final permit, the Secretary will describe in writing how the discharge satisfies the Policy.
4. The Secretary recognizes that many water quality protection controls (e.g. best management practices) are in a continual state of improvement and development. As a result, information regarding the existence, effectiveness, or costs of control practices for reducing pollution and meeting water quality standards may be incomplete. In these instances, the Policy will be considered to have been met for individual permits that rely on a formal process to select, develop, adopt and refine control practices for protecting water quality and meeting the intent of the Policy. This adaptive process must:
  - (a) ensure that information is developed and used expeditiously to revise individual permits;
  - (b) review and refine control practices in cycles not to exceed five years or the period of permit reissuance; and
  - (c) include a plan that describes how information will be obtained and used to ensure full compliance with the Policy.

#### C. Review of Applications for General Permit Coverage

1. The Secretary may issue general permits for categories of discharges. At the time the Secretary develops a general permit for new discharges subject to this Part, the Secretary will apply the Policy and this

Procedure. A general permit shall include a discussion of how the Policy and this Procedure were considered in the issuance of the general permit.

2. An individual Tier 2 analysis is not required for discharges seeking authorization under a general permit unless the Secretary determines based on credible and relevant information and best professional judgment that the discharge requires an individualized Tier II analysis due to its potential impact. In such a case, the discharge will be required to obtain coverage under an individual permit.
3. In order to increase the predictability and efficiency of its permitting programs and to protect the water quality of high quality waters, the Secretary reserves the right to develop manuals of best management practices or other treatment and control requirements for discharges subject to anti-degradation review. The selection of best management practices or other treatment or control requirements in these manuals may take into account anti-degradation requirements and may include consideration of the socioeconomic effects of requiring certain BMPs or other treatment or control requirements. If a manual takes into account anti-degradation requirements, including a consideration of the socioeconomic effects of requiring certain BMPs or treatment and control requirements, then a permittee implementing such identified BMPs or other treatment and control requirements through an authorization under a general permit shall be presumed to meet the Policy absent credible and relevant project or site-specific information rebutting the presumption.
4. The Secretary recognizes that many water quality protection controls, including but not limited to best management practices, are in a continual state of improvement and development. As a result, information regarding the existence, effectiveness, or costs of control practices for reducing pollution and meeting water quality standards may be incomplete. In these instances, the antidegradation requirements of the Policy will be considered to have been met for general permits that rely on a formal process to select, develop, adopt and refine control practices for protecting water quality and meeting the intent of the Policy. This adaptive process must:
  - (a) Ensure that information is developed and used expeditiously to revise permit or program best management practices requirements;
  - (b) Review and refine management and control programs in cycles not to exceed five years or the period of permit reissuance; and
  - (c) Include a plan that describes how information will be obtained and used to ensure full compliance with the Policy. The plan must be developed and documented in advance of general permit approval under this subsection.

#### D. Presumptions

1. Based on credible and relevant information, the nature of the discharge, applicable treatment and control standards, including but not limited to best management practices required by law for the discharge and the best professional judgment of Agency staff, the Secretary has determined that the following discharges automatically satisfy Tier 2 review under the Policy:
  - (a) A discharge that meets the requirements of a BMP or treatment and control manual that takes into consideration anti-degradation requirements during its adoption; or
  - (b) A discharge that is seeking authorization to operate under a general permit when the Tier 2 analysis is performed at the time of the development of the general permit; or
  - (c) A discharge that results in no measurable reduction in the physical, chemical or biological quality of a surface water; or
  - (d) A discharge that is in compliance with the Vermont Stormwater Management Manual and any additional best management practices that will be used to control the stormwater discharge.
2. The presumptions in D.1 above may be rebutted on a case-by-case basis if warranted by credible and relevant information available to the Secretary during his/her review of an application for a proposed discharge.
3. Notwithstanding the presumptions in D.1 above, the Secretary may determine based on credible and relevant information and best professional judgment of Agency staff that the potential cumulative impact associated with a proposed discharge will result in a reduction in water quality warranting a complete Tier 2 review.

#### E. Tier 3 - Protection of Outstanding Resource Waters

1. Under 10 V.S.A. §1424a, the Vermont Water Resources Panel may designate waters as Outstanding Resources Waters if it finds that the waters have exceptional natural, recreational, cultural or scenic values. Section 1-03 (D) of the Standards provides that where the Panel designates Outstanding Resource Waters "because of their water quality values, their existing high quality shall be protected and maintained."

2. An evaluation of the potential impacts of a discharge to water quality values identified by an Outstanding Water Resources designation shall only be considered if:
  - (a) the proposed discharge will improve water quality or is necessary for the maintenance of current environmental conditions; or
  - (b) the proposed discharge is temporary and it is expected that water quality in the receiving water will be equal to or better than that which existed prior to commencement of the discharge. In order to be considered temporary, the duration of the discharge must typically occur over a period of days or months, not years.

#### F. Tier 2 - Protection of High Quality Waters

##### 1. Determination of High Quality Waters:

- (a) Waters whose existing ambient water quality exceeds (i.e. is better than) the applicable minimum water quality criteria and indices for the class to which the waterbody is assigned shall be considered high quality water.
- (b) A waterbody will be assessed as high quality on a parameter by parameter basis, specific to its designated use. A waterbody may not meet water quality criteria for all parameters, yet be considered high quality for other parameters for which the related use is supported.
- (c) The Secretary will presume that all waters are high quality for at least one criterion and/or index for some portion of the year. This presumption may be rebutted by credible and relevant information obtained by or provided to the Secretary.

##### 2. Determination of Reduction of Water Quality

- (a) Section 1-03 of the Standards provides that a limited reduction in the existing higher quality of high quality waters may be allowed only when the socioeconomic justification test set forth in the Policy is met.
- (b) In the course of reviewing an application under the Policy and this Procedure, the Secretary shall determine whether the proposed discharge will result in a limited reduction in water quality in a high quality water by utilizing all credible and relevant information and the best professional judgment of Agency staff.

(c) If the Secretary determines that a proposed discharge will result in a reduction in water quality, the Secretary shall not issue a permit or approval unless the Secretary finds that allowing a limited reduction in water quality satisfies the socioeconomic justification test in the Policy.

(d) For discharges subject to this Part, the Secretary may consider, when appropriate, one or more of the following factors when determining if a proposed new discharge will result in a reduction in water quality:

- i. Any measurable change in ambient water quality criteria predicted at the appropriate critical conditions;
- ii. percent and total change in loadings;
- iii. percent reduction in available assimilative capacity;
- iv. nature, persistence and potential effects of the pollutant;
- v. ratio of stream flow to discharge flow (dilution ratio);
- vi. duration of discharge;
- vii. measurable impacts to aquatic biota or habitat;
- viii. existing physical, chemical and biological data for the receiving water;
- ix. degree of hydrologic or sediment regime modifications;  
and
- x. any other flow modifications.

(e) Assessment of Cumulative Impacts. Any evaluation of whether a proposed discharge will result in a lowering of water quality shall include a consideration of cumulative impacts. Examples of factors that may be considered, as appropriate, include but are not limited to:

- i. Nature of resource impacted – e.g. stream, lake, river, wetland, watershed;
- ii. Existing physical, chemical and biological data for the receiving water;

- iii. Current legally authorized activities and discharges in the affected receiving water or watershed;
  - iv. Effect of the proposed activity or discharge;
  - v. Percent impervious cover in the associated watershed;
  - vi. Degree of flow or water level regulation;
  - vii. Change in land cover relative to natural cover;
  
  - viii. Number and type of activities and extent of development in stream/river corridors, floodplains, and watershed; and
  - ix. Biomonitoring data including results from targeted monitoring plans for at risk watersheds (e.g. monitoring of sub-jurisdictional projects, highly developed watersheds, high elevation streams)
3. As part of the effort to address cumulative impacts, the Department will, where feasible and allowed by law, conduct program-specific activities (e.g. rivers program corridor planning, offset programs) intended to reduce existing impacts and create assimilative capacity for new or increased discharges. The existence of such programs will be considered during the Secretary's evaluation of cumulative impacts during review of an application.
4. Socio-Economic Justification Test
- (a) The Policy provides that a limited reduction in the existing higher quality of high quality waters may be allowed only when it is shown that:
    - i. the adverse economic or social impacts on the people of the state specifically resulting from the maintenance of the higher quality waters would be substantial and widespread;
    - ii. these adverse impacts would exceed the environmental, economic, social and other benefits of maintaining the higher water quality; and
  - (b) there shall be achieved the highest statutory and regulatory requirements for all new or existing point sources, and all cost effective and reasonable accepted agricultural practices and best management practices, as appropriate for nonpoint source control, consistent with state law.



- (c) To the extent any reduction in the quality of high quality waters is allowed, such reduction shall be limited to that which is necessary to comply with Subsection 4(a) above.
- (d) In conducting the Policy's socioeconomic justification test, the Secretary will utilize all credible and relevant information and the best professional judgment of Agency staff. Examples of factors that may be considered, as appropriate, include but are not limited to:
  - i. measurable changes in economic and social conditions, specifically tax base, number and types of jobs created or impacted;
  - ii. measurable direct and indirect economic benefits;
  - iii. correction of an environmental, public health, or public safety problem;
  - iv. environmental, economic, and other benefits of maintaining the higher water quality;
  - v. the loss or reduction of aquatic biota, aquatic habitat, and recreational value that may result from lower water quality;
  - vi. information provided from other government agencies and public participation; and
  - vii. public use or accessibility of a resource.
- (e) An applicant may propose mitigating measures that reduce the impact of the proposed lowering of water quality and which may also increase the economic and social benefits to be considered in this analysis.

#### G. Tier 1 – Protection of Existing Uses

- 1. The existing uses of waters, and the level of water quality necessary to protect those existing uses, shall be maintained and protected. Existing uses are a confirmation of the set of designated uses in the Standards regardless of the classification of the water.
- 2. In making a determination of existing uses to be protected and maintained under the Policy, the Secretary shall consider at least the following factors:
  - (a) Aquatic biota and wildlife that utilize or are present in the waters;

- (b) Habitat that supports existing aquatic biota, wildlife; or plant life;
- (c) The use of the waters for recreation or fishing;
- (d) The use of the water for water supply, or commercial activity that depends directly on the preservation of an existing high level of water quality; and
- (e) With regard to the factors considered under paragraphs (a) and (b) above, evidence of the uses' ecological significance in the functioning of the ecosystem or evidence of the uses' rarity.

3. In identifying existing uses, the Secretary will:

- (a) for contact and non-contact recreation, fishing and public surface water supplies consider the information that the applicant submitted in accordance with the *Agency's Process for Determining Recreational Uses*; information gathered in accordance with the *DEC 2008 Basin Planning Procedure for Determination of Existing Uses* during the development of basin plans; any relevant information from an applicable basin plan; and any other relevant information regarding use of the receiving waters for contact and non-contact recreation, fishing and public surface water supplies; and
- (b) for all other uses, including but not limited to, aquatic habitat, biota, and wildlife, presume that if the designated uses of the receiving waters are currently being achieved and will continue to be achieved after evaluation of the proposed activity, then any identified existing uses will also be maintained and protected.

4. If an existing use is identified that requires more stringent water quality conditions than those set forth in the classification of the receiving water, any permit issued by the Secretary must ensure the maintenance of water quality necessary to protect that existing use.

**X. Discharges Subject to Water Quality Certifications Issued Pursuant to Section 401 of the federal Clean Water Act for shoreland encroachments, stream alterations and activities in wetlands**

A. Applicability

- 1. Discharges subject to Water Quality Certifications issued pursuant to Section 401 of the federal Clean Water Act for shoreland encroachments, stream alterations and activities in wetlands shall be reviewed under this Section X.

## B. Review of Applications for Individual Permit Coverage

1. In order to increase the predictability and efficiency of its permitting programs and to protect the water quality of high quality waters, the Secretary reserves the right to develop manuals of best management practices or other treatment and control requirements for discharges subject to anti-degradation review. The selection of best management practices or other treatment or control requirements in these manuals may take into account anti-degradation requirements and may include consideration of the socioeconomic effects of requiring certain BMPs or other treatment or control requirements. If a manual takes into account anti-degradation requirements, including a consideration of the socioeconomic effects of requiring certain BMPs or treatment and control requirements, then a permittee implementing such identified BMPs or other treatment and control requirements through an individual permit shall be presumed to meet the Policy absent credible and relevant project or site-specific information rebutting the presumption.
2. The Secretary will apply the Policy and this Procedure in reviewing applications for individual permits subject to this Part. At the time of issuance of a draft individual permit and in any final permit, the Secretary will describe in writing how the discharge satisfies the Policy and this Procedure.
3. The Secretary recognizes that many water quality protection controls (e.g. best management practices) are in a continual state of improvement and development. As a result, information regarding the existence, effectiveness, or costs of control practices for reducing pollution and meeting water quality standards may be incomplete. In these instances, the Policy will be considered to have been met for individual permits that rely on a formal process to select, develop, adopt and refine control practices for protecting water quality and meeting the intent of the Policy. This adaptive process must:
  - (a) ensure that information is developed and used expeditiously to revise individual permits;
  - (b) review and refine control practices in cycles not to exceed five years or the period of permit reissuance; and
  - (c) include a plan that describes how information will be obtained and used to ensure full compliance with the Policy.

## C. Review of Applications for General Permit Coverage

1. The Secretary may issue general permits for categories of discharges. At the time the Secretary develops a general permit for new discharges subject to this Part, the Secretary will apply the Policy and this

Procedure. A general permit shall include a discussion of how the Policy and this Procedure were considered in the issuance of the general permit.

2. An individual Tier 2 analysis is not required for discharges seeking authorization under a general permit unless the Secretary determines based on credible and relevant information and best professional judgment that the discharge requires an individualized Tier II analysis due to its potential impact. In such a case, the discharge will be required to obtain coverage under an individual permit.
3. In order to increase the predictability and efficiency of its permitting programs and to protect the water quality of high quality waters, the Secretary reserves the right to develop manuals of best management practices or other treatment and control requirements for discharges subject to anti-degradation review. The selection of best management practices or other treatment or control requirements in these manuals may take into account anti-degradation requirements and may include consideration of the socioeconomic effects of requiring certain BMPs or other treatment or control requirements. If a manual takes into account anti-degradation requirements, including a consideration of the socioeconomic effects of requiring certain BMPS or treatment and control requirements, then a permittee implementing such identified BMPs or other treatment and control requirements through an authorization under a general permit shall be presumed to meet the Policy absent credible and relevant project or site-specific information rebutting the presumption.
4. The Secretary recognizes that many water quality protection controls, including but not limited to best management practices, are in a continual state of improvement and development. As a result, information regarding the existence, effectiveness, or costs of control practices for reducing pollution and meeting water quality standards may be incomplete. In these instances, the Policy will be considered to have been met for general permits that rely on a formal process to select, develop, adopt and refine control practices for protecting water quality and meeting the intent of the Policy. This adaptive process must:
  - (a) Ensure that information is developed and used expeditiously to revise permit or program best management practices requirements;
  - (b) Review and refine management and control programs in cycles not to exceed five years or the period of permit reissuance; and
  - (c) Include a plan that describes how information will be obtained and used to ensure full compliance with the Policy. The plan must be developed and documented in advance of general permit approval under this subsection.

#### D. Presumptions

1. Based on credible and relevant information, the nature of the discharges, applicable treatment and control standards including but not limited to best management practices required by law for the discharge and the best professional judgment of Agency staff, the Secretary has determined that the following discharges automatically satisfy Tier 2 review under the Policy:
  - (a) Discharges that meet the requirements of a BMP or treatment and control manual that takes into consideration anti-degradation requirements during its adoption; or
  - (b) A discharge that is seeking authorization to operate under a general permit when the Tier 2 analysis is performed at the time of the development of the general permit; or
  - (c) Discharges that result in no measurable reduction in the physical, chemical or biological quality of a surface water; or
  - (d) Stream alteration activities resulting in channel geometry and fluvial processes where bed and bank erosion are neither increased nor transferred to other stream locations, and where floodplain function is maintained or restored over time; or
  - (e) Activities covered by the Army Corps of Engineers wetlands general permit with <3,000 square feet of disturbance to Class III wetlands.
2. The presumption in D.1 above may be rebutted on a case-by-case basis if warranted by credible and relevant information available to the Secretary during his/her review of an application for a proposed discharge.
3. Notwithstanding the presumption in D.1 above, the Secretary may determine based on credible and relevant information and best professional judgment of Agency staff that the potential cumulative impact associated with a proposed discharge will result in a reduction in water quality warranting a complete Tier 2 review.

#### E. Tier 3 - Protection of Outstanding Resource Waters

1. Under 10 V.S.A. §1424a, the Vermont Water Resources Panel may designate waters as Outstanding Resources Waters if it finds that the waters have exceptional natural, recreational, cultural or scenic values. Section 1-03 (D) of the Standards provides that where the Panel designates Outstanding Resource Waters "because of their water quality values, their existing high quality shall be protected and maintained."

2. An evaluation of the potential impacts of a discharge to water quality values identified by an Outstanding Water Resources designation shall only be considered if:
  - (a) the proposed discharge will improve water quality or is necessary for the maintenance of current environmental conditions; or
  - (b) the proposed discharge is temporary and it is expected that water quality in the receiving water will be equal to or better than that which existed prior to commencement of the discharge. In order to be considered temporary, the duration of the discharge must typically occur over a period of days or months, not years.

#### F. Tier 2 - Protection of High Quality Waters

##### 1. Determination of High Quality Waters

- (a) Waters whose existing ambient water quality exceeds (i.e. is better than) the applicable minimum water quality criteria and indices for the class to which the waterbody is assigned shall be considered high quality water.
- (b) A waterbody will be assessed as high quality on a parameter by parameter basis, specific to its designated use. A waterbody may not meet water quality criteria for all parameters, yet be considered high quality for other parameters for which the related use is supported.
- (c) The Secretary will presume that all waters are high quality for at least one criterion and/or index for some portion of the year. This presumption may be rebutted by credible and relevant information obtained by or provided to the Secretary.

##### 2. Determination of Reduction of Water Quality

- (a) Section 1-03 of the Standards provides that a limited reduction in the existing higher quality of high quality waters may be allowed only when the socioeconomic justification test set forth in the Policy is met.
- (b) In the course of reviewing an application under the Policy and this Procedure, the Secretary shall determine whether the proposed discharge will result in a limited reduction in water quality in a high quality water by utilizing all credible and relevant information and the best professional judgment of Agency staff.
- (c) If the Secretary determines that a proposed discharge will result in a reduction in water quality, the Secretary shall not issue a permit

or approval unless the Secretary finds that allowing a limited reduction in water quality satisfies the socioeconomic justification test in the Policy.

- (d) For discharges subject to this Section X, the Secretary may consider, when appropriate, one or more of the following factors when determining if a proposed new discharge will result in a reduction in water quality:
- i. the predicted change, if any, in ambient water quality criteria at the appropriate critical conditions;
  - ii. the nature, persistence and potential effects of the pollutant;
  - iii. the ratio of stream flow to discharge flow (dilution ratio);
  - iv. the duration of the discharge;
  - v. whether there are impacts to aquatic biota or habitat that are capable of being detected in the applicable receiving water;
  - vi. the existing physical, chemical and biological data for the receiving water;
  - vii. the degree of hydrologic or sediment regime modifications; and
  - viii. any other flow modifications.
- (e) For discharges subject to this Section X, the Secretary may consider, when appropriate, one or more of the factors listed in subsection 2(d) above in determining if there is a reduction in water quality in high quality waters. In addition, the Secretary may consider as appropriate one or more of the following discharge-specific factors in determining if there will be a reduction in water quality:
- i. For lake and river encroachments:
    - a. Percent coverage of a commercial dock system relative to the surface area of the lake or river section it is located in, along with the other existing legally authorized docks and encroachments;
    - b. The generally accepted level and type of use (especially boat traffic and shoreland development) of the section of the lake or river;

- c. The design elements of shoreline stabilization; vegetated designs preferred;
- d. The general type and number of other local shoreline stabilization designs such that the proposed design is consistent with the surroundings.

ii. For stream alteration activities:

- a. Whether the proposed change in the course, current, or cross-section of the stream would be inconsistent with the channel geometry and fluvial processes associated with equilibrium conditions, and the likelihood for increased sediment and nutrient loading from precipitation-driven bed and bank erosion and/or the loss of floodplain attenuation.

iii. For activities in wetlands:

- a. Degree of alteration of wetland hydrology;
- b. Degree of alteration of vegetation (e.g. removal, mowing);
- c. Extent of filling/dredging activities in hydric soils;
- d. Existence of discharges to surface waters;
- e. Change from natural biological condition;
- f. Impacts to functions and values (uses) or to wetland condition.

(f) Assessment of Cumulative Impacts. Any evaluation of whether a discharge subject to this Part will result in a lowering of water quality shall include a consideration of cumulative impacts. Examples of factors that may be considered, as appropriate, include but are not limited to:

- i. Nature of resource impacted – e.g. stream, lake, river, wetland;
- ii. Existing physical, chemical and biological data for the receiving water;



- iii. Current authorized activities and discharges in the affected receiving water;
  - iv. Effect of the proposed activity or discharge on water quality, including but not limited to assimilative capacity, physical and chemical constituents;
  - v. ;
  - vi. Percent of wetland impacted;
  - vii. Stream equilibrium condition, including geomorphic condition, channel adjustment processes, and sensitivity, at the reach and valley segment scales;
  - viii. Degree of flow or water level regulation;
  - ix. Change in land cover relative to natural cover;
  - x. Percent cover of jurisdictional lake surface area with docks and other encroachments;
  - xi. Riparian conditions; Existing riparian conditions, % of lake shoreline length with structural stabilizations and development within 50 feet of the shore;
  - xii. Number and type of activities and extent of development in stream/river corridors, and floodplains; and
  - xiii. Impact of the proposed discharge on aquatic biota and aquatic habitat.
3. As part of the effort to address cumulative impacts, the Department will, where feasible and allowed by law, conduct program-specific activities (e.g. rivers program corridor planning, offset programs) intended to reduce existing impacts. The existence of such programs will be considered during the Secretary's evaluation of cumulative impacts during review of an application.
4. Socio-Economic Justification Test
- (a) The Policy provides that a limited reduction in the existing higher quality of high quality waters may be allowed only when it is shown that:
    - i. the adverse economic or social impacts on the people of the state specifically resulting from the maintenance of the higher quality waters would be substantial and widespread;

- ii. these adverse impacts would exceed the environmental, economic, social and other benefits of maintaining the higher water quality; and
  - iii. there shall be achieved the highest statutory and regulatory requirements for all new or existing point sources, and all cost effective and reasonable accepted agricultural practices and best management practices, as appropriate for nonpoint source control, consistent with state law.
- (b) To the extent any reduction in the quality of high quality waters is allowed, such reduction shall be limited to that which is necessary to comply with Subsection 4(a) above.
- (c) In conducting the Policy's socioeconomic justification test, the Secretary will utilize all credible and relevant information and the best professional judgment of Agency staff. Examples of factors that may be considered, as appropriate, include but are not limited to:
- i. measurable changes in economic and social conditions, specifically tax base, number and types of jobs created or impacted;
  - ii. measurable direct and indirect economic benefits;
  - iii. correction of an environmental, public health, or public safety problem;
  - iv. environmental, economic, and other benefits of maintaining the higher water quality;
  - v. the loss or reduction of aquatic biota, aquatic habitat, and recreational value that may result from lower water quality;
  - vi. information provided from other government agencies and public participation; and
  - vii. public use or accessibility of a resource.
- (d) An applicant may propose mitigating measures that reduce the impact of the proposed lowering of water quality and which may also increase the economic and social benefits to be considered in this analysis.

#### G. Tier 1 – Protection of Existing Uses

1. The existing uses of waters, and the level of water quality necessary to protect those existing uses, shall be maintained and protected. Existing uses are a confirmation of the set of designated uses in the Standards regardless of the classification of the water.
2. In making a determination of existing uses to be protected and maintained under the Policy, the Secretary shall consider at least the following factors:
  - (a) Aquatic biota and wildlife that utilize or are present in the waters;
  - (b) Habitat that supports existing aquatic biota, wildlife; or plant life;
  - (c) The use of the waters for recreation or fishing;
  - (d) The use of the water for water supply, or commercial activity that depends directly on the preservation of an existing high level of water quality; and
  - (e) With regard to the factors considered under paragraphs (a) and (b) above, evidence of the uses' ecological significance in the functioning of the ecosystem or evidence of the uses' rarity.
3. In identifying existing uses, the Secretary will:
  - (a) for contact and non-contact recreation, fishing and public surface water supplies consider the information that the applicant submitted in accordance with the Agency's Process for Determining Recreational Uses; information gathered in accordance with the DEC 2008 Basin Planning Procedure for Determination of Existing Uses during the development of basin plans; any relevant information from an applicable basin plan; and any other relevant information regarding use of the receiving waters for contact and non-contact recreation, fishing and public surface water supplies; and
  - (b) for all other uses, including but not limited to, aquatic habitat, biota, and wildlife, presume that if the designated uses of the receiving waters are currently being achieved and will continue to be achieved after evaluation of the proposed activity, then any identified existing uses will also be maintained and protected.
4. If an existing use is identified that requires more stringent water quality conditions than those set forth in the classification of the receiving water, any permit issued by the Secretary must ensure the maintenance of water quality necessary to protect that existing use.

## **XI. Groundwater Withdrawal Permits**

A. Applicability

1. Applications for a groundwater withdrawal permit under 10 V.S.A. §1418 shall be reviewed under this Section XI.

B. Presumptions

1. Based on credible and relevant information, the nature of the discharge, applicable treatment and control standards required by law for the discharge and the best professional judgment of Agency staff, the Secretary has determined that the following groundwater withdrawals automatically satisfy Tier 2 review under the Policy:
  - (a) A groundwater withdrawal that does not have a hydrologic connection with a surface water; or
  - (b) A groundwater withdrawal that has a hydrologic connection with a surface water, but the withdrawal meets the hydrology criteria of the standards; or
  - (c) A groundwater withdrawal that has a hydrologic connection with a surface water, but the withdrawal qualifies as de minimis under the Agency Procedure for Determining Acceptable Minimum Streamflows.
2. The presumptions in B.1 above may be rebutted on a case-by-case basis if warranted by credible and relevant information available to the Secretary during his/her review of an application for a proposed discharge.
3. Notwithstanding the presumptions in B.1 above, the Secretary may determine based on credible and relevant information and best professional judgment of Agency staff that the potential cumulative impact associated with a proposed discharge will result in a reduction in water quality warranting a complete Tier 2 review.

C. Tier 3 - Protection of Outstanding Resource Waters

1. Under 10 V.S.A. §1424a, the Vermont Water Resources Panel may designate waters as Outstanding Resources Waters if it finds that the waters have exceptional natural, recreational, cultural or scenic values. Section 1-03 (D) of the Standards provides that where the Panel designates Outstanding Resource Waters "because of their water quality values, their existing high quality shall be protected and maintained."

2. An evaluation of the potential impacts of a discharge to water quality values identified by an Outstanding Water Resources designation shall only be considered if:
  - (a) the proposed discharge will improve water quality or is necessary for the maintenance of current environmental conditions; or
  - (b) the proposed discharge is temporary and it is expected that water quality in the receiving water will be equal to or better than that which existed prior to commencement of the discharge. In order to be considered temporary, the duration of the discharge must typically occur over a period of days or months, not years.

D. Tier 2 - Protection of High Quality Waters

1. The Secretary will conduct any Tier 2 analysis of an application for a groundwater withdrawal permit in accordance with Section VIII.F. of this Procedure.

E. Tier 1 – Protection of Existing Uses


1. The existing uses of waters, and the level of water quality necessary to protect those existing uses, shall be maintained and protected. Existing uses are a confirmation of the set of designated uses in the Standards regardless of the classification of the water.
2. In making a determination of existing uses to be protected and maintained under the Policy, the Secretary shall consider at least the following factors:
  - (a) Aquatic biota and wildlife that utilize or are present in the waters;
  - (b) Habitat that supports existing aquatic biota, wildlife; or plant life;
  - (c) The use of the waters for recreation or fishing;
  - (d) The use of the water for water supply, or commercial activity that depends directly on the preservation of an existing high level of water quality; and
  - (e) With regard to the factors considered under paragraphs (a) and (b) above, evidence of the uses' ecological significance in the functioning of the ecosystem or evidence of the uses' rarity.
3. In identifying existing uses, the Secretary will:
  - (a) for contact and non-contact recreation, fishing and public surface water supplies consider the information that the applicant

submitted in accordance with the Agency's Process for Determining Recreational Uses; information gathered in accordance with the DEC 2008 Basin Planning Procedure for Determination of Existing Uses during the development of basin plans; any relevant information from an applicable basin plan; and any other relevant information regarding use of the receiving waters for contact and non-contact recreation, fishing and public surface water supplies; and

- (b) for all other uses, including but not limited to, aquatic habitat, biota, and wildlife, presume that if the designated uses of the receiving waters are currently being achieved and will continue to be achieved after evaluation of the proposed activity, then any identified existing uses will also be maintained and protected.
4. If an existing use is identified that requires more stringent water quality conditions than those set forth in the classification of the receiving water, any permit issued by the Secretary must ensure the maintenance of water quality necessary to protect that existing use.

Signed this 12<sup>th</sup> day of October, 2010

By: \_\_\_\_\_

  
Justin Johnson, Commissioner, Department of Environmental Conservation