

***The Goose Creek Subbasin  
Implementation Plan 2010***

Prepared by:

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Of the

Idaho Department of Environmental Quality  
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And the major water user industries:

Confined Feeding Operations Industry  
Irrigated Agriculture Industry  
Grazing Industry  
Recreation Industry

Draft Document  
January 28, 2010 – Issued to Lake Walcott WAG

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## PREPARERS AND CONTRIBUTORS

The development of *The Goose Creek Subbasin Implementation Plan 2010* was a monumental task that has brought together the Idaho Department of Environmental Quality (DEQ) and several major water user industries in the Goose Creek Subbasin. The implementation plan is an outgrowth of the Goose Creek TMDL and the Goose Creek 5-Year Review for point and nonpoint sources. The express purpose is to restore the beneficial uses and/or water quality standards of Section 303(d) streams in the Goose Creek Subbasin. Oversight and preparation of the plan was done by DEQ with assistance from State designated agencies for specific water user industries. Dr. Balthasar B. Buhidar, Ph.D. prepared the overall document with technical assistance from Mike Etcheverry and Katie Shewmaker. Maps were designed and created by Sean Coyle, DEQ-Technical Services. State designated agencies included the following:

<u>DESIGNATED AGENCY</u>	<u>CONTACT</u>	<u>INDUSTRY</u>
Idaho Department of Agriculture		Aquaculture BMPs
Idaho Department of Lands	Timothy C. Duffner	State Lands
Idaho Soil Conservation Commission	Chuck Pentzer	Agriculture
Idaho Soil Conservation Commission	Carolyn Firth	Agriculture
Idaho Soil Conservation Commission	Chuck Pentzer	Private grazing
Idaho Soil Conservation Commission	Carolyn Firth	Private grazing
Idaho Dept of Environmental Quality	Dr. Balthasar B. Buhidar	All other activities
Idaho Dept of Environmental Quality	Mike Etcheverry	All other activities
Idaho Dept of Environmental Quality	Katie Shewmaker	All other activities
Bureau of Land Management – Lands		Public Lands
Bureau of Land Management – Recreation		Public Lands
U. S. Forest Service – Lands		Public Lands
U. S. Forest Service – Recreation		Public Lands
U. S. Parks & Recreation		Public Lands

The Idaho Department of Environmental Quality-Twin Falls Regional Office received additional technical assistance from the following:

<u>AGENCY/ORGANIZATON</u>	<u>CONTACT</u>	<u>INDUSTRY</u>
Lake Walcott Watershed Advisory Group	Earl Christensen	Multiple industries

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## **Part 0 - INTRODUCTION**

### **I. PRELIMINARY**

At this time implementation plans are not considered mandatory to the TMDL process in Idaho. However, DEQ and the water user industries chose to do an implementation plan in the Goose Creek Subbasin for the following reasons:

1. To maintain a proactive approach in the Goose Creek Subbasin Section 303(d)-waterbody cleanup effort as assessment units (AU's). By maintaining a proactive approach, all water user industries can focus on management schemes/strategies and approaches that will be used on Section 303(d) waterbodies as AU's and on other waterbodies that have yet to be defined as impaired.
2. To focus on post-TMDL activities on Section 303(d) waterbodies as AU's by seeking after funding sources to promote water quality cleanup projects and efforts.
3. To provide reasonable assurance to the U. S. Environmental Protection Agency (EPA) and DEQ that both point and nonpoint source industries have reduction plans in place target beneficial use attainment of Section 303(d) streams as AU's. An attainment goal for beneficial uses typically covers a 10-year period. However, a longer period may be needed if it can be demonstrated scientifically or otherwise that 10 years is insufficient and technically impossible.

This implementation plan has precedence in the Upper Snake Rock TMDL (2000; 2005), the Mid-Snake TMDL (1997), and the Billingsley Creek TMDL (1993) in the Upper Snake Rock subbasin. Each of these TMDL's had mini-implementation plans associated with the approved TMDL. In addition, the implementation plan also has precedence in the Lake Walcott Implementation Plan (draft 2005), which was modeled after the Upper Snake Rock Implementation Plan. It is an iterative document that incorporates adaptive management on all Section 303(d) streams as AU's.

“The primary purpose of any implementation plan under the TMDL process is to identify and describe the specific pollution controls or management measures to be undertaken; the mechanisms by which the selected pollution control and management measures will be put into action; and, the authorities, regulations, permits, contracts, commitments, or other evidence sufficient to ensure that implementation will take place. The plan also describes when implementation will take place, identifies when various tasks or actions items will begin and end, when mid-term and final objectives will be met, and establishes dates for meeting water quality targets” (IDEQ 1999 [Appendix D, p 5]).

To this end, this document as The Goose Creek Subbasin Implementation Plan incorporates a basic outline that all water user industries will attempt to follow in order to maintain a sense of consistency throughout the document and the process. The outline was developed by DEQ with input from the Lake Walcott Watershed Advisory Group (WAG) and the Goose Creek Committee. The draft outline was presented to the Lake Walcott WAG on January 28, 2010 at

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their regular WAG meeting in Burley, Idaho. Goose Creek Committee members were mailed copies of the plan on or by January 29, 2010. At that time a pre-scheduled meeting for [DATE] was selected as the time when the implementation plans would be presented in draft form by all the industries. That outline is as follows with appropriate comments following.

## **IMPLEMENTATION PLAN OUTLINE**

1. INTRODUCTION
2. PUBLIC INVOLVEMENT
3. IMPLEMENTATION TIMELINE: SHORT- AND LONG-TERM GOALS
4. PROPOSED MANAGEMENT ACTIONS & LINKAGE TO BENEFICIAL USES
5. DISCUSSION OF COSTS AND FUNDING
6. COMPLIANCE ACTIONS
7. THREATENED OR ENDANGERED SPECIES
8. IDENTIFICATION OF STAKEHOLDERS
9. REASONABLE ASSURANCE
  - a. IMPLEMENTATION EFFECTIVENESS MONITORING PLAN
  - b. MAINTAINING MANAGEMENT ACTIONS OVER TIME
  - c. EVALUATION OF IMPLEMENTATION EFFECTIVENESS
10. REFERENCES

DEQ will maintain oversight during the implementation process and will rely on all existing authorities for the attainment of beneficial uses and/or state water quality standards on all Section 303(d) streams as AU's in the Gosse Creek Subbasin. Annual reports will be submitted to DEQ by month of January for the proceeding twelve (12) months of industry activities.

## **II. PUBLIC INVOLVEMENT**

The public involvement process is very critical and necessary for subbasin assessment and total maximum daily load development, and implementation plan development. Involvement by water user industries is very critical to the success of water quality restoration on Section 303(d) streams as AU's. The members of the Lake Walcott Watershed Advisory Group and the Goose Creek Committee were very helpful in the development of the implementation plan for the Goose Creek Subbasin.

By statute, "members of each watershed advisory group shall be representative of the industries and interests affected by the management of that watershed, along with representatives of local government and the land managing or regulatory agencies with an interest in the management of that watershed and the quality of the water bodies within it" (Idaho Code §39-3615). The Lake Walcott Watershed Advisory Group and the Goose Creek Committee are made up of these interests and will continue to assist DEQ in the management of the watershed for beneficial use attainment of Section 303(d) listed waterbodies as AU's.

## **III. IMPLEMENTATION TIMELINE**

Implementation timelines have already been written in the approved Goose Creek TMDL (2004). These timelines are based on the specific industry that is involved in the subbasin. The following discussion provides a general summary of these timelines for point and nonpoint sources. Each industry will develop its own specific timelines within their individual

implementation plan. DEQ will provide oversight for review and assessment of short-term and long-term goals. DEQ will also maintain a database for purposes of review and assessment of wasteload allocation limits and load allocation limits. Reviews and/or assessments will be done in the fifth and tenth year of plan implementation. Such reviews and/or assessments will be presented to the WAG and Committee for their comments as appropriate.

## POINT SOURCE INDUSTRIES

In the Goose Creek Subbasin there exist no point sources at the present time. Therefore, no discussion of point source industries is necessary at this time.

## NONPOINT SOURCE INDUSTRIES

As discussed in the Goose Creek TMDL (2004; p 200, Section 5.5): “The purpose of this implementation strategy is to outline the pathway by which a larger, more comprehensive, implementation plan will be developed 18 months after TMDL approval.” Although a formal implementation document was not developed 18 months after TMDL approval due to DEQ workload issues, the development of the Goose Creek 5-Year Review brought to light this deficiency; and therefore is now more formally addressed in this document.

Nonpoint source industries in the Goose Creek Subbasin include grazing, agriculture, FERC facilities, forestry, CFOs, and recreation. “When establishing permits for point sources in the watershed, the record should show that in the case of any credit for future nonpoint source reductions, (1) there is reasonable assurance that nonpoint source controls will be implemented and maintained or (2) that nonpoint source reductions are demonstrated through an effective monitoring program (EPA 1991 [p 24]).” Essentially, reasonable assurance for nonpoint sources means that non-enforceable actions will result in load allocations for nonpoint sources required by the Goose Creek TMDL.

When necessary, DEQ is prepared to discuss with any federal, State, or local agency/entity, or private landowners, the possibility of carrying out such non-enforceable actions through the signing of necessary agreements to achieve success on the water quality limited waterbodies. Such agreements will be pertinent to the restoration of beneficial uses and water quality standards and may include water quality monitoring. Additionally in the case of federal agencies, DEQ supports the *Forest Service and Bureau of Land Management Protocol for Addressing Clean Water Act Section 303(d) Listed Waters* (USFS & USBLM & USEPA 1999) which is to “protect and maintain water quality where standards are met or surpassed, and restore water-quality-limited waterbodies within their jurisdiction to conditions that meet or surpass standards for designated beneficial uses.”

Management actions and control actions called for to implement the Goose Creek TMDL began immediately long before the approval of the Goose Creek TMDL by EPA. Many of the water user industries were either already involved in management actions, or took a proactive approach by beginning early their management actions and control actions. The Goose Creek TMDL is designed with the goal of expeditiously attaining compliance with water quality standards, particularly in defining and repairing water quality impairments through the stream corridor approach. It is DEQ’s belief that attainment of water quality standards and beneficial uses will be met as expeditiously as practicable within the 10-year allotted time frame with

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implementation of management and control actions. However, in the event that beneficial uses are not attained, then the feedback loop as a component of adaptive management in conjunction with monitoring will be used for re-evaluation for implementation of more stringent measures if needed.

For purposes of defining the implementation time frame, the Goose Creek TMDL was approved in 2004. Therefore, the 10-year allotted time frame would be 2014. However, since the Goose Creek Subbasin Implementation Plan was drafted in 2010, the general goal will be to meet beneficial uses in 2020, with interim time frame goals as described in Table 1.

A description of control actions (management measures or best management practices) that could be implemented to achieve the goals of the TMDL for nonpoint sources should be defined for all nonpoint source industries. For the Goose Creek Subbasin, Table 1 describes the short-term and long-term goals that are prescribed for nonpoint source industries and DEQ. These goals will provide a reasonable assurance that nonpoint sources are committed to complying with their reduction plans per pollutant. Each short-term and long-term goal would also follow suit with the point source industry short-term and long-term industries; assuming point sources existed in the Goose Creek Subbasin.

**Table 1. Short- and long-term goals for nonpoint sources and DEQ on a pollutant basis**

<b>POLLUTANT</b>	<b>INDUSTRY</b>	<b>YEAR 1 (2010)</b>	<b>YEAR 3 (2013)</b>	<b>YEAR 5 (2015)</b>	<b>YEAR 8 (2018)</b>	<b>YEAR 10 (2020)</b>
TSS TP E. coli	Grazing	Development & Plan Implementation	Review	Review & Assessment	Review	Review & Assessment
	Agriculture					
	FERC Facilities					
	Forestry					
	CFOs	Zero Discharge	Zero Discharge	Zero Discharge	Zero Discharge	Zero Discharge
			Review	Review & Assessment	Review	Review & Assessment
	Recreation	Development & Plan Implementation	Minimal Impacts	Review & Assessment	Minimal Impacts	Review & Assessment
	Roads		Review			
	Construction					
	Mining (AML)					
Runoff: Urban & Rural						

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	Septic Tanks				
	Other	Database			
Temperature	Re-evaluation of temperature criteria via project study by DEQ				
Flow	No Flow TMDL; Conservation flows encouraged				
Industry Plans	Each industry will be responsible for the development of an annual summary review and assessment of water quality goals and targets for the Goose Creek Subbasin. Plans developed under the Goose Creek TMDL will be revised and applied specific for impaired streams.				
Prepared by DEQ. A database of each industry will be maintained by DEQ. TP = total phosphorus. TSS = total suspended solids. E. coli = Escherichia coli. FERC = Federal Energy Regulatory Commission. Development & Plan Implementation = Development and implementation of management plans. Review = Review of management plans by DEQ, WAG, and designated agency. Assessment = Assessment of beneficial use attainment by DEQ, WAG, and designated agency. Land management agencies in conjunction with DEQ will review BMP maintenance periodically. The feedback loop and adaptive management are important components the short-term and long-term goals.					

## IV. PROPOSED MANAGEMENT ACTIONS AND LINKAGE TO BENEFICIAL USES

All proposed management actions (best management practices) on Section 303(d) waterbodies as AU's must be applied for the purpose of attaining beneficial uses and/or state water quality standards. Unless otherwise defined, it will be assumed that attainment of beneficial uses is the principal goal of restoring the beneficial uses of a Section 303(d) stream as an AU.

## V. COMPLIANCE ACTIONS

The objective of the Goose Creek TMDL is to allocate allowable loads among different pollutant sources so that the appropriate control actions can be taken and water quality standards achieved. The total pollutant load to a waterbody is derived from point (if applicable), nonpoint, and background sources. The Goose Creek TMDL has attempted to consider the effect of all activities or processes that cause or contribute to the water quality limited conditions of all waterbodies in the Goose Creek Subbasin beyond those listed on the 1998 303(d) list and the 2008 Integrated Report.

Compliance actions for the point source industries are dependent on their NPDES permit and the TMDLs involved in the Goose Creek Subbasin. As previous noted, no point sources exist in the Goose Creek Subbasin at this time.

Compliance actions for nonpoint source industries are dependent on three perspectives: State of Idaho lands, federal public lands, and private lands. Each requires its own unique set of responsibilities and actions. State lands and public lands are described in Part 6 and Part 7 of the Goose Creek Implementation Plan. DEQ will work collaboratively with these agencies and their permittees on all allotments that contain water quality limited waterbodies for attainment of beneficial uses and/or state water quality standards. Private lands are described in Part 6 and Part 7 of the Goose Creek Implementation Plan. DEQ will work collaboratively with the Idaho Soil Conservation Commission and other agencies/organizations on all private lands that contain water quality limited waterbodies for attainment of beneficial uses and/or state water quality standards.

## VI. THREATENED AND ENDANGERED SPECIES PROTECTION

The Endangered Species Act requires federal agencies to consult with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) when there is

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discretionary federal involvement or control over a federal action (such as NPDES permitting), whether obvious (issuance of a new federal permit), or less direct (State operation of a program that retains federal oversight, such as the NPDES program). Formal consultation between a federal agency and the USFWS becomes necessary when:

1. The federal agency requests consultation after determining the proposed action may affect listed species or critical habitat; or
2. The USFWS, through informal consultation, do not concur with the federal agency's finding that the proposed action is not likely to adversely affect the listed species or critical habitat.

To the extent practical all implementation activities on Section 303(d) streams as AU's where threatened or endangered species reside will be conducted in such a fashion as to minimize the taking of any threatened or endangered species. To the extent practical all implementation activities on Section 303(d) streams as AU's where critical habitat exists will be conducted in such a fashion as to minimize the destruction of such critical habitat.

All NPDES permittees, when and if such facilities come into the Goose Creek Subbasin, must abide by the imposed limits in order to reasonably assure EPA and USFWS that the taking of any threatened or endangered species, or the destruction of any critical habitat, is minimized. The willful taking of any threatened or endangered species, or the willful destruction of critical habitat, is a violation of the NPDES permit restrictions and the Endangered Species Act and punishable by enforcement provisions.

All nonpoint source activities including the management actions that involve best management practices will be conducted in such a fashion as to minimize the taking of any threatened or endangered species. All nonpoint source activities including the management actions that involve best management practices will be conducted in such a fashion as to minimize the destruction of critical habitat. The willful taking of any threatened or endangered species, or the willful destruction of critical habitat, is a violation of the Endangered Species Act and punishable by enforcement provisions.

### **VII. IDENTIFICATION OF STAKEHOLDERS**

All stakeholders for both point and nonpoint sources will be identified and disclosed to all parties so that public comment and participation can be more complete. Point and nonpoint industries must disclose all their individual facilities that carry out the characteristics and functions of their industry. In particular is this disclosure necessary when attempting to secure funding sources for remediation or recovery programs that concern themselves with restoration of beneficial uses and/or state water quality standards on Section 303(d) streams as AU's.

### **VIII. REASONABLE ASSURANCE**

Control measures to implement this TMDL are not limited to NPDES authorities, but are based on the reasonable assurance that State and local authorities and actions to reduce nonpoint source pollution will also occur. "There must be assurances that nonpoint source control measures will achieve expected load reductions in order to allocate a wasteload to a point

source with a TMDL that also allocates expected nonpoint source load reductions (EPA 1991 [p 22]).” The Goose Creek TMDL has load allocations and wasteload allocations calculated with margins of safety to meet water quality standards. However, the allocations are based on estimates, which have used available data and information. Therefore, monitoring for the collection of new data is necessary and required. For the Goose Creek TMDL the reasonable assurance that it will meet its goal of water quality standards is based on three components:

First, point source NPDES permits will require monitoring for generation of new data that will be used for wasteload allocation concerns.

Second, nonpoint source implementation of BMPs that will be based on land management agency assurances that reductions will occur.

And, third, a trend monitoring plan that will be used to document relative changes in various aquatic organism populations. This trend monitoring plan will also consider physical and chemical water quality parameters over a 10-year period in conjunction with data from various agencies, organizations, and water user industries to assess overall progress towards attainment of water quality standards and related beneficial uses.

These three components are further defined as follows:

#### **A. IMPLEMENTATION EFFECTIVENESS MONITORING PLAN**

Idaho Code §39-3621 provides that “the designated agencies, in cooperation with the appropriate land management agency and the DEQ shall ensure BMPs are monitored for their effect on water quality. The monitoring results shall be presented to the DEQ on a schedule agreed to between the designated agency and the DEQ.” “Where no monitoring program exists, or where additional assessments are needed, it is necessary for States to design and implement a monitoring plan. The objectives of monitoring include the assessment of water quality standards attainment, verification of pollution source allocations, calibration or modification of selected models, calculation of dilutions and pollutant mass balances, and evaluation of point and nonpoint source control effectiveness. In their monitoring programs, States should include a description of data collection methodologies and quality assurance/quality control procedures, a review of current discharger monitoring reports, and be integrated with volunteer and cooperative monitoring programs where possible. The monitoring program will result in a sufficient database for assessment of water quality standard attainment and additional predictive modeling if necessary (EPA 1991 [p 22]).” Monitoring provides the information needed to evaluate management. Trend monitoring in conjunction with implementation of BMPs will be used to determine which management measures and BMPs are being implemented, whether management measures and BMPs are being implemented as designed, and the need for increased efforts to promote or induce use of management measures and BMPs. It may be necessary to modify current or proposed monitoring programs to those that are more inline with an adaptive management style for the watershed.

Data from implementation monitoring, used in combination with trend monitoring, will be useful in meeting the following objectives:

1. To evaluate BMP effectiveness for protecting soil and water resources.
2. To identify areas in need of further investigation.
1. To establish a reference point of overall compliance with BMPs.
2. To determine whether farmers are aware of BMPs.
3. To identify any BMP implementation problems specific to a category of farms.
6. To evaluate whether any agricultural practices cause environmental damage.
7. To compare the effectiveness of alternative BMPs.
8. To assess if allocations are sufficient to attain beneficial uses.
9. To assess if short-term and long-term milestones are being met.
10. To describe whom will carry out and finance the monitoring activities.

A trend monitoring plan goal on water quality parameters currently exists for the Snake River in the Goose Creek Subbasin. See Section 5.5 of the Goose Creek TMDL.

## **B. MAINTAINING MANAGEMENT ACTIONS OVER TIME**

Maintaining management actions over time are identified as short-term and long-term goals in the Goose Creek TMDL (Section 5.5, pp 200-206). Each individual implementation plan will have its own set of short-term and long-term goals. A summary of these goals and time lines has been presented in this implementation plan under Part 0, Introduction, III. Implementation Timeline.

## **C. EVALUATION OF IMPLEMENTATION EFFECTIVENESS**

As part of the implementation process for all industries in the Goose Creek Subbasin, a 5-year milestone report will be submitted to DEQ to account for any and all activities that have been implemented on water quality limited waterbodies. This report will be available to the public, the Lake Walcott Watershed Advisory Group and the Goose Creek Committee for comment.

## **IX. REFERENCES**

All references inclusive of those found in the individual implementation plans will be listed in Part 9, References for the entire plan or plans at the end of the overall implementation plan.

## **Part 1. Irrigated Agriculture Industry**

In Development

Involved Industries/Agencies:

ISCC

NRCS

SCDs

Private Land Owners

Canal Companies

Other?

**Part 2. Grazing Industry: State Lands, Public Lands and Private Lands**

In Development

Involved Industries/Agencies:

BLM

USFS

IDL

Private Land Owners

Idaho Cattle Association

Other?

**Part 3. Animal Feeding Operations & Confined Feeding  
Operations Industries**

In Development

Involved Industries/Agencies:

Feedlots

Dairies

Idaho Dairy Association

Idaho Cattle Association

Other?

## **Part 4. Hydroelectric Power Industry**

In Development

Involved Industries/Agencies:

BOR

Small Conduit Exempt Projects (FERC licensed)

FERC licensed facilities

Other?

## **Part 5. Recreation Industry: State Lands, Public Lands and Private Lands**

In Development

Involved Industries/Agencies:

BLM

USFS

IDL?

Parks and Recreation (federal and State)

Other?

**Part 6. Point Source Industries**

In Development

Involved Industries/Agencies:

At this time there are no known point sources in the Goose Creek Subbasin.

**Part 7. Other Industries**

In Development

Involved Industries/Agencies:

Aquaculture?

**Part 8. DEQ's Implementation Responsibilities**

In Development

**Part 9. References**

In Development

