

**FINAL SCOPING REPORT FOR
HALLIGAN SEAMAN WATER MANAGEMENT PROJECT
ENVIRONMENTAL IMPACT STATEMENT**



HALLIGAN RESERVOIR



MILTON SEAMAN RESERVOIR

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1.0 Introduction

The U.S. Army Corps of Engineers (Corps) is preparing an Environmental Impact Statement (EIS) to analyze the direct, indirect, and cumulative effects of a water supply project referred to as the Halligan Seaman Water Management Project (HSWMP or Project). The Projects are being proposed by the cities of Fort Collins and Greeley (the Cities) and includes partnerships with the North Poudre Irrigation Company (NPIC); three water districts collectively known as the Tri-District including North Weld County Water District (NWCWD), the Fort Collins-Loveland Water District (FCLWD), the East Larimer County Water District (ELCO); the City of Evans, and the Water Supply and Storage Company (WSSC). The National Environmental Policy Act (NEPA) requires that the public and interested parties be included in the decision making process regarding federal actions or federally funded actions. The process of involving the public is termed “scoping”. Scoping, as defined by NEPA (§1501.7), is an early and open process to gather information from the public and interested agencies on the issues and alternatives to be evaluated in the Environmental Impact Statement (EIS). The Corps initiated the scoping process for the HSWMP by publishing a Notice of Intent (NOI) to prepare an EIS for the Project in the Federal Register on February 1, 2006. The purposes of scoping are to:

- Inform the participants about the background, purpose, and features of the project.
- Gather information about the issues and concerns, and identify the significant issues to be analyzed in detail in the EIS.
- Identify a reasonable range of alternatives and potential impact to be addressed in the EIS.

This report summarizes the issues identified in the public and agency scoping meetings and documents the results of the entire scoping process to date.

1.1 Overview of the Halligan Seaman Water Management Project

HSWMP primarily involves enlarging two existing reservoirs, Halligan and Milton Seaman, which are owned by the cities of Fort Collins and Greeley, respectively. HSWMP proposes the construction of larger dams down stream from the existing dam sites to increase the raw water storage capacity of each reservoir. Currently, Halligan Reservoir is capable of storing 6,400 acre feet (af) and Milton Seaman 5,008 af of raw water. The proposed enlargements will result in a raw water storage capacity of 40,000 af in the Halligan reservoir and approximately 60,000 af active storage in the Milton Seaman reservoir. Water that will be necessary to fill the enlarged Halligan reservoir is proposed to come from existing Fort Collins water rights, while Greeley proposes to acquire and convert agricultural water in the Poudre Basin to municipal use in order to fill the enlarged Milton Seaman reservoir.

Fort Collins and Greeley (hereafter “the Cities”) propose the enlargements of these reservoirs to meet their needs to provide sufficient raw water storage to ensure a reliable water supply during a 1 in 50 year drought, and based on population forecasts more efficiently manage their existing water rights. The Cities have identified the HSWMP as

the preferred alternative to address these needs, but the Corps will evaluate other practicable alternatives through the NEPA process. Each alternative, with the exception of possibly the No Action alternative, will represent an alternative means of satisfying the project's Purpose and Need.

The Corps has determined that an EIS must be prepared to assist in the identification of the purpose and need of the projects, alternatives and to evaluate the potential impacts to human health and the environment of each of the identified alternatives. As required by NEPA, the EIS will provide an objective and thorough assessment of the potential significant impacts of the preferred alternative and reasonable alternatives. Information provided during the scoping meetings identified the significant issues, alternatives, and potential impacts that will become the basis for the detailed assessment associated with the EIS.

2.0 Public Scoping Process Activities

Public scoping activities included publication of a Notice of Intent (NOI) in the *Federal Register*, paid advertisements announcing public scoping meetings, a scoping announcement, publication of Project information on the Halligan-Seaman web site and Corps web site, and supplemental outreach meetings. These activities are described in the following sections. The NOI and paid advertisements are provided in Appendix A.

2.1 Notice of Intent

The Corps initiated the scoping process by publishing a NOI to prepare an Environmental Impact Statement for the HSWMP in the *Federal Register* on February 1, 2006. The NOI provided a brief description of the project, information regarding public scoping meetings, and solicited comments. The NOI stated that comments received by March 17, 2006 (45 days following the publication of the NOI) would be included in this Scoping Report. Comments received after March 17, 2006 will be considered during the EIS preparation.

2.2 Paid Advertisements

Advertisements announcing the public scoping meetings and that solicited participation in the scoping process were placed in the legal notices and/or public notices sections of eight newspapers with staggered publication dates to increase the opportunity for people to notice the announcement. Table 1 lists the local publications in which advertisements were placed.

Table 1. Publication and dates of paid advertisements.

Name of Publication	Date	Distribution Type
North Forty News (Livermore)	February 2006	Monthly
Fossil Creek Current (Livermore)	February 2006	Monthly
Fort Collins Forum	February 9, 2006	Monthly
Daily Reporter-Herald, Loveland	February 15, 2006	Daily
Fort Collins Coloradoan	February 15, 2006	Daily
La Tribuna, Greeley	February 16, 2006	Weekly
The Tribune, Greeley	February 17, 2006	Daily
Rocky Mountain News	February 18, 2006	Daily

2.3 Scoping Document

A scoping document was prepared and distributed that outlined information about the HSWMP, the EIS process, and public involvement (provided in Appendix B). The scoping document also provided dates, times, and locations for the three public meetings, a comment sheet, and contact information for the Corps. The scoping document was translated into Spanish to reach the Spanish speaking population, a concern primarily in Greeley.

A single mailing list was compiled from lists provided by the Cities. The mailing list included individuals, the Corps Denver Regulatory Office and other federal agencies, state agencies, state and U.S. congressional representatives, cities, counties, and other local representatives and nongovernmental organizations. On February 17, 2006 a total

of 450 scoping documents were mailed to members on the mailing list. Scoping documents were also made available at various locations in Greeley and Fort Collins (Appendix C).

2.4 Web Sites

The Corps and the Cities both maintain web pages providing information on the HSWMP. Both web sites contained the NOI, scoping document, and comment sheet for the public to download. The Corps web site (<https://www.nwo.usace.army.mil/html/od-tl/eis-info.htm>) is designed to provide the public with NEPA documents and is updated periodically. The Cities web site (<http://www.halligan-seaman.com>) contains additional information on HSWMP including the history of the project, description of participants, contact information, documents, maps, and upcoming events. The Cities web site is updated regularly.

2.5 Public Scoping Meetings

The Corps held three public scoping meetings to solicit ideas, issues, and concerns about the HSWMP. The meetings were held in Livermore, Fort Collins, and Greeley during the month of February 2006 (Table 2).

Table 2. Public scoping meeting attendance.

Location	Date	Facility	Time	Attendance
Livermore	February 23, 2006	Livermore Community Church	4:00-8:00 p.m.	30
Fort Collins	February 27, 2006	Fort Collins Lincoln Center	4:00-8:00 p.m.	117
Greeley	February 28, 2006	Bunkhouse at Island Grove	4:00-8:00 p.m.	18

Each scoping meeting was conducted in an open house format. Attendees were welcomed at the door, asked to sign in, provided a scoping document that included a comment sheet, and encouraged to submit written comments at the meeting. Attendees were then directed to the station provided by the Cities that described the HSWMP. The Corps provided additional stations presenting information on various aspects of the EIS process (Table 3). Representatives from the Corps, the Cities, and the WEST Team (the Corps' EIS consultants) were present at their respective stations to answer questions, accept comments, and encourage attendees to submit written comments. Tables were available in the middle of each room to accommodate people composing comments at the meeting. Attendees were informed they may also take the comment sheets home and submit their comments by mail, facsimile, or electronic mail (email). Attendance sheets were maintained at each scoping meeting and are provided in Appendix D. A summary of the comments received is provided in Section 4 of this report and copies of the comments received are included in Appendix E.

Table 3. Scoping meeting stations and associated representative.

Station	Representative
Description of Project	Greeley and Fort Collins
NEPA Process and 404 Permit	Corps and EIS Team
Hydrology and Water Resources	Corps and EIS Team
Natural Resources (Wildlife, Vegetation, Wetlands, Threatened and Endangered Species)	Corps and EIS Team

Fish and Other Aquatic Life	Corps and EIS Team
Recreation	Corps and EIS Team
Socioeconomics	Corps and EIS Team
Cultural Resources	Corps and EIS Team

The Fort Collins scoping meeting had the largest number of registered attendees with 117. The Livermore scoping meeting was attended by 30 and the Greeley scoping meeting was attended by 18. This attendance is conservative in that a few attendees elected not to sign in at each meeting.

The scoping document and the paid announcements stated that arrangements would be made to accommodate special needs if requested by a certain date. No special needs requests were received. However, at the Greeley scoping meeting there was a Spanish translator available.

2.6 Supplemental Outreach Activities

The Corps and WEST Team were available for informal meetings with individuals, interested groups, or agency representatives to discuss the process and hear of their concerns and suggestions for issues to be considered. There were only two meetings requested.

Mr. Dale Lake, President of the Landowners Association of Phantom Canyon Ranches (LAPCR) met with Dale Strickland (EIS Team) on November 17, 2005 at the WEST, Inc. office in Cheyenne, Wyoming. Mr. Lake provided a description of the LAPCR, reviewed maps showing land ownership, and expressed the desire that the association's control of access on Halligan Reservoir continue following the project.

Another request was made for a representative from the EIS Team to present information regarding the HSWMP followed by a question and answer session at the annual meeting of the LAPCR. The meeting was held in Fort Collins at the Home State Bank on December 6, 2005 at 4:00 p.m. Mr. Chandler Peter, the Corps project manager attended this meeting and provided information regarding the NEPA and 404 process.

3.0 Agency Scoping Process

The Corps held a separate meeting to gather input from local, state, and federal agencies having regulatory authority or an interest in the HSWMP. Additionally, the Corps sent letters to Native American tribes to inform them of the project and to solicit input. These activities are briefly discussed below.

3.1 Cooperating Agency Scoping Meeting Summary

The Corps submitted a written request (Appendix F) to the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, U.S. Forest Service, Colorado Division of Wildlife, Larimer County Manager, and the Weld County Planning Office to participate as cooperating agencies in the preparation of the EIS for the HSWM Project pursuant to 40 CFR 1501.6. The Corps has received formal letters accepting the offer to participate as a cooperating agency from the U.S. Forest Service and the Environmental Protection Agency and has executed a cooperating agency agreement with the Larimer County Manager. There has been no response from U.S. Fish and Wildlife Service, Colorado Division of Wildlife, or Weld County Planning Office in relation to the cooperating agency request.

A cooperating agency scoping meeting was conducted by the Corps on February 23, 2006 in Fort Collins, Colorado from 1:00 – 3:00 p.m. The agency scoping meeting included an introduction and description of the NEPA and 404 process by the Corps, followed by a Power Point presentation of the Applicant's Preferred Alternative, and a question and comment period facilitated by the Corps.

Seventeen members from various agencies and organizations attended the agency meeting. The following agencies and organizations were represented:

- U.S. Army Corps of Engineers (Corps) – Omaha District and Denver Regulatory Office
- U.S. Fish and Wildlife Service (USFWS)
- U.S. Forest Service (USFS)
- Colorado Division of Wildlife (CDOW)
- Larimer County

Agencies that will be participating in the scoping process, but were unable to attend the Agency Scoping Meeting include the U.S. Environmental Protection Agency (EPA) and Weld County.

Comments were taken from those present. Several of the agencies indicated that they needed additional time to formulate their concerns and issues and would respond at a later date. The Corps has received comment letters from federal and state agencies since the agency scoping meeting. These comments are summarized in Section 4 of this document and copies of the written comments from agencies are provided in Appendix G.

3.2 Native American Consultation

The Corps contacted 59 Native American tribes in writing to solicit input regarding the proposed project. The tribes, councils, and agencies that were contacted include:

Apache Tribe of Oklahoma	Northern Cheyenne Tribe
Assiniboine and Sioux Tribes of Fort Peck	Northern Ute Tribe
Blackfeet Tribal Business Council	Northern Ute Tribe, Uintah and Ouray Tribal Business Committee
Blackfeet Tribe	Ogalala Sioux Tribe
Cheyenne NAGPRA	Omaha Tribe of Nebraska
Cheyenne-Arapaho Tribes of Oklahoma	Otoe-Missouria Tribal Council
Cheyenne River Sioux Tribe	Pawnee Nation of Oklahoma
Chippewa Cree Tribe of the Rocky Boys' Reservation	Ponca Tribe of Nebraska
Comanche Nation	Ponca Tribe of Oklahoma
Comanche Tribe of Oklahoma	Prairie Band Potawatomi Nation
Confederated Salish and Kootenai Tribes	Rosebud Sioux Tribe
Crow Creek Sioux Tribe	Sac and Fox Nation
Crow Nation	Sac and Fox Nation of Mississippi
Crow Tribe	Sac and Fox Nation Oklahoma
Eastern Shoshone Tribe	Sac and Fox of the Mississippi in Iowa
Flandreau Santee Sioux Tribe	Sac and Fox Tribe of the Mississippi in Iowa
Fort Belknap Indian Community Gros Ventre and Assiniboine Tribes	Santee Sioux Nation, Environment Protection Department
Fort Belknap Tribes	Sisseton-Wahpeton Oyate
Fort Sill Apache Business Committee	Sisseton-Wahpeton Sioux Tribe
Gros Ventre and Assiniboine Tribes	Southern Ute Indian Tribe
Iowa Tribe of Kansas	Spirit Lake Sioux Tribe
Iowa Tribe of Oklahoma	Spirit Lake Tribe
Jicarilla Apache Tribe	Standing Rock Sioux Tribe
Kickapoo Tribe in Kansas	Three Affiliated Tribes
Kiowa Tribe of Oklahoma	Trenton Indian Service Area
Lower Brule Sioux Tribe	Turtle Mountain Band of Chippewa
Mni Sose Intertribal Water Rights Coalition, Inc.	Ute Mountain Tribe
Northern Arapaho Tribe	Winnebago Tribe of Nebraska
Northern Cheyenne Tribal Council	Yankton Sioux Tribe

Two tribes, the Standing Rock Sioux Tribe and the Cheyenne River Sioux Tribe, responded to the request (letters provided in Appendix G). A representative from the Tribal Historic Preservation Office of the Standing Rock Sioux Tribe responded in a letter dated March 22, 2006, expressing interest in the project and concern over the loss of important cultural resources or Tribal Cultural Properties due to submersion and stream bank erosion. The representative also indicated a desire to review the procedural plans for testing potential sites for eligibility to the National Register of Historic Places and reviewing the cultural resources inventories conducted for the HSWMP. The Tribal Historic Preservation Officer/Archeologist of the Cheyenne River Sioux Tribe stated in a

letter dated March 24, 2006 that he would be interested in reviewing the Archaeological Resource Inventory when completed.

4.0 Summary of Issues

The following is a general characterization and analysis of the comments received during the agency and public scoping processes. All the comments and questions received will be considered in the EIS.

Written comments were received at the scoping meetings, submitted through the US postal service mail, electronic mail (email), facsimile, and online. All the comments were summarized and organized according to various categories. A total of 79 written comments were received, 37 of which were submitted during the scoping meetings and the balance submitted to the Corps by email, facsimile, and postal service.

Analysis of the comments yielded 25 major categories. Most of the individuals submitting comments addressed more than one major category and often addressed more than one issue within each major category. Thus, there were a 369 total comments made by 249 commenters. Table 4 lists the number of comments in each major category and Table 5 summarizes the number of commenters that commented on issues within each of the categories.

Table 4. Number of comments in each major category.

Major Category	Number of Comments
Purpose and Need	50
Alternatives	33
Surface Water	56
Groundwater	3
Water Rights and Use	3
Air Quality	2
Soils	2
Ecosystems	8
Vegetation	13
Wetlands	6
Wildlife	24
Aquatic Resources	23
TES	10

Major Category	Number of Comments
Cultural Resources	7
Land Use	20
Recreation	37
Visual Resources	6
Socioeconomics	16
Transportation	17
Noise	5
Dam Safety	2
Cumulative Impacts	18
Mitigation	3
NEPA	5
General Comments	2

Table 5. Number of individuals making comments (commenters) in each major category.

Major Category	Number of Commenters
Purpose and Need	37
Alternatives	24
Surface Water	31
Groundwater	4
Water Rights and Use	3
Air Quality	3
Soils	2
Ecosystems	5
Vegetation	9
Wetlands	7
Wildlife	12

Major Category	Number of Commenters
Aquatic Resources	12
TES	8
Cultural Resources	4
Land Use	9
Recreation	26
Visual Resources	3
Socioeconomics	10
Transportation	11
Noise	3
Dam Safety	2
Cumulative Impacts	11

Major Category	Number of Commenters
Mitigation	7
NEPA	6

Major Category	Number of Commenters
General Comments	2

The majority of the comments received addressed surface water (15.4%), purpose and need (13.5%), recreation (10.0%), alternatives (8.9%), wildlife resources (6.5%), aquatic resources (6.2%) and land use (5.4%) (Figure 1). The remainder of the major categories each had less than 5% of the total comments.

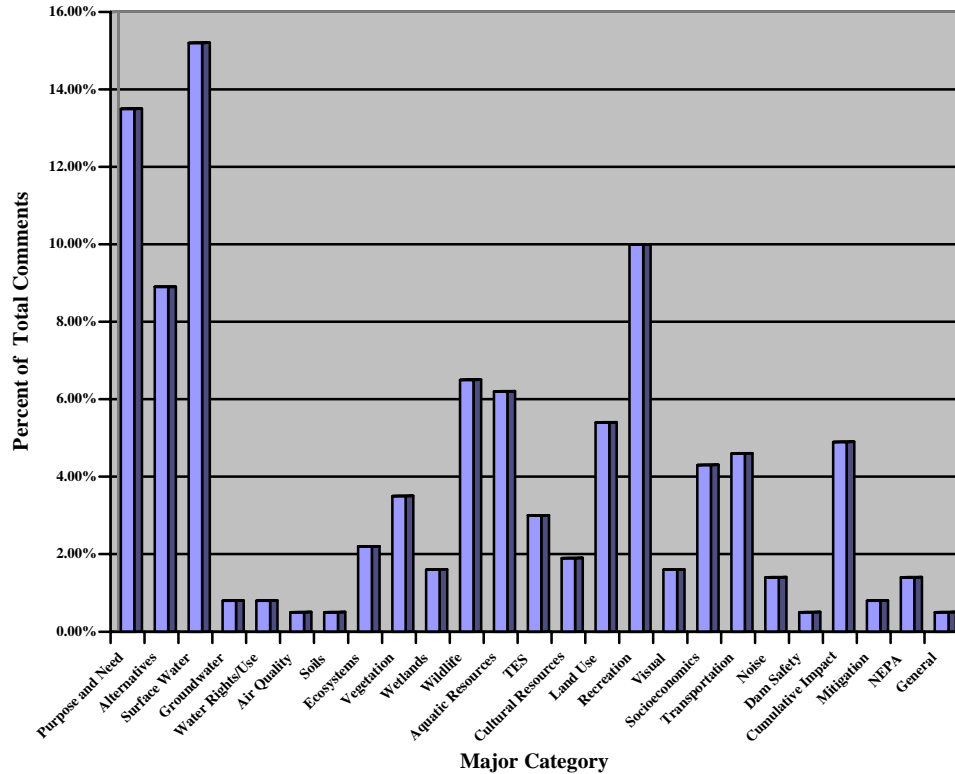


Figure 1. Percentage of total comments for each major category.

As the EIS progresses and the potential impacts of the selected alternatives are defined, issues may be added, modified, or deleted. Appendix H presents a list of the 80 comment letters received by the Corps and the authors of the letters. The following section provides a brief description of the issues, concerns, and recommendations associated with each major category. This section provides a brief summary of each issue raised during the scoping process, but does not list every individual comment that was received. A detailed list of the comments is provided in Appendix I.

4.1 Purpose and Need

At the time of scoping, well-defined purpose and need statement was not available. Currently, a purpose and need statement is being developed by the Corps and the Cities. The information presented at the scoping meetings by the Cities indicated that the reservoir expansions were needed to improve the efficiency of management of water

rights owned, or to be acquired, by the Cities through increased storage, which would result in providing reliable water supplies for a 1 in 50 year drought under projected demands. Many comments questioned the need and requested that the projections of water use incorporate factors that influence demand, such as water conservation, economic growth, current per-capita water usage, and population growth estimates. One comment requested that the methodology used for the water demand analysis be provided and should be consistent with all the participants. Several comments questioned the size and cost of the expansions. Other comments requested more information about specific details relating to dam construction. There were many who supported the projects and saw the importance of water storage for future generations.

4.2 Alternatives

Alternatives had not been developed at the time of the scoping meetings and only the Cities Proposed Alternatives were described. However, comments were made regarding other potential alternatives. Most of the comments centered around two concepts; conservation and improving existing components of the water systems. Conservation comments generally implied that the need could be met by more conservation efforts. The improvements focused on the dredging and use of smaller existing lakes and reservoirs, and upgrading the ditch systems (i.e. NPIC) with linings. One comment requested that a clear, qualitative understanding of current water uses and the alternatives available to reduce water use be provided.

4.3 Surface Water Flow

The primary issue in comments relating to surface flow involved the amount of flow that would remain in the North Fork and main stem of the Cache La Poudre River after construction of the new dams. A concern was expressed that sufficient flows should be maintained to support aquatic life downstream of the dams and the channel forming capability of the North Fork of the Cache La Poudre River.

Comments were received requesting a thorough evaluation of the stream flows in terms of hydrologic character, seasonal stream flow, and pre-historic flows. Other comments inquired about what threshold flow levels and flow regime would be utilized in the analysis and asked for justification for the use of those levels.

There were several comments regarding the management and release of water from the reservoirs. These comments included requests for operational guidelines and assurances that stream flows would improve and be more consistent with winter flows in the North Fork and the main stem of the Cache La Poudre River. Summer water releases were identified as potentially damaging to the stream banks and aquatic environments, thus information regarding how these releases would be handled was requested. How the spring floods would be maintained through the length of the affected reaches and downstream was a concern in relation to the timing of significant biological events. Additionally, some comments identified the potential to improve base flows and peak flows through Phantom Canyon by means of reservoir operations.

A comment expressed concern regarding how sediment releases would be managed. It was suggested that the releases be made on a smaller and more frequent basis, preferably during the spring prior to runoff. One comment mentioned that there is a Total Maximum Daily Load (TMDL) for sediment on the North Fork of the Cache La Poudre and was concerned how this project would impact the TMDL.

Comments addressed water quality both in the rivers (main stem and North Fork of the Cache La Poudre River) and the reservoirs. The concerns identified the need to maintain the health of the North Fork of the Cache La Poudre River and the potential for downstream water in the main stem to be affected by increases in nutrients (particularly phosphorus), sediment, and dissolved solids resulting from a fluctuating shoreline associated with the reservoirs. Concerns were expressed regarding the potential negative effects of public recreation and residential access to the reservoirs on the water quality. It was requested that the predicted water temperature (mean daily and maximum daily) in the Poudre river basin downstream from the reservoirs be provided in electronic files that can be read with standard PC tools, such as Excel.

Some comments requested specific information regarding surface water. One comment requested description and location of hydrologic character of streams in their respective reaches, while another requested a description and location of stream flows identified by seasonal and possibly historic characteristics. It was mentioned that base flow studies should be completed at a sufficient level of detail to provide meaningful information regarding the trade-offs between specific levels of base flow and of the quantity and quality of resultant aquatic habitat.

Several comments addressed the modeling that would be used during the analysis. One comment inquired how the hydrologic model would incorporate evaporation and the effects that reduced peak flows may have on net alluvial aquifer recharge. Another comment requested that the inputs and outputs from the scenarios be clearly documented and provided in electronic files that are easily readable using standard PC tools, such as Excel. It was stated that the hydrology should be examined both longitudinally and laterally and that flow be represented in cubic feet per second and not acre feet per month.

Several comments were concerned about impacts on the downstream ecosystems due to possible interruptions in stream flow, water quality, and sediment releases associated with dam construction activities.

4.4 Groundwater Resources

Comments relating to groundwater included concern about the potential affects of the project on personal water wells, concern about the projects affect on recharge of the aquifers, and compensation by the Cities if potable water wells are impacted.

4.5 Water Rights and Water Use

Three comments addressed water rights and use. One requested evaluation of the impact on water use due to the conversion from agriculture to residential over the next 50 years.

Another comment was similar, but was concerned about potential impacts on the ecosystems due to the change from agriculture to municipal use. The third comment was a statement regarding the astonishing increase on the value of water due to the lack of supply.

4.6 Air Quality

Two comments expressed concern regarding air quality. One comment related to the potential for increased dust storms that may result from barren soil due to reservoir fluctuations. The other comment wanted the potential effects from construction truck traffic on dirt roads to be evaluated.

4.7 Soils

Two comments relating to soil were received. One comment stated concern over the potential for wind erosion due to exposed soil when the water level in the reservoir drops. The second comment recognized the natural silt build up that occurs within a reservoir and was concerned about the impact to aquatic life by mitigating the build up through releases from the dam.

4.8 Ecosystem Level

Some comments requested an evaluation of the ecosystems and biological communities that the North Fork and main stem of the Cache La Poudre Rivers support be evaluated for impacts due to the changes in the natural pulse of the North Fork of the Cache La Poudre River and periodic droughts. One comment asked for baseline environmental information for the current conditions. A comment requested that a thorough biological review of tributaries above Halligan and between Seaman and Halligan be conducted for three scenarios (Seaman alone, Halligan alone, and Halligan and Seaman operating together). Another comment raised the issue of the effects of increased shoreline and loss of stream above each reservoir. Additionally, a comment requested that the flood plain be identified and communicated to the public as they will impact Eagle's Nest Open Space and The Nature Conservancy land. One comment identified that the construction process would potentially impact the environment and thus should be evaluated.

4.9 Vegetation

Vegetation comments mainly included issues surrounding construction affects on native plants. Several comments identified the potential impact of invasive weeds due to construction and requested mitigation measures be identified. Restoration using native vegetation was specifically mentioned as desirable. In addition, comments were submitted regarding the potential increase of fire danger, and the change in grazing patterns that will occur as a result of the loss of forage of livestock.

4.10 Wetlands

Wetland comments included concerns regarding the effects of sediment and changes in stream flow on wetland/riparian resources downstream. One comment stated that impacts from inundation on the wetland/riparian habitat needs to be mitigated with clear consideration of past failures in similar compensatory mitigation. Restoration of

wetlands/riparian habitats below the dams was recommended. A description and location of the aquatic and riparian vegetation was requested.

4.11 Wildlife

Wildlife comments focused on habitat loss. Comments regarding loss of habitat included the concern for the potential destruction of habitat due to inundation and the ability to maintain a stream flow adequate for wildlife. Comments also expressed concern that habitat for elk, deer and possibly mountain lion would be lost due to their inability to cross the Cache La Poudre River to access portions of their current ranges after the reservoirs are expanded. Additionally, there was a comment that the ability of the Colorado Division of Wildlife to manage herds of elk and deer through harvest would be reduced.

Some comments requested effects be evaluated for specific species including river otter, mountain bighorn sheep, bear, beaver, coyotes, raccoons, and other small mammals, as well as several avian species including water ouzels, heron, hawks, eagles, waterfowl, and shorebirds. Restoration for all wildlife habitat impacted was requested. Recreation was identified as potentially impacting wildlife and needed to be evaluated.

There were comments that effects from construction activities on wildlife needed to be evaluated and that all fence used during construction be wildlife friendly. The introduction of disease and invasive animal species by construction crews was a concern expressed in two comments. A recommendation was made to inform construction personnel to be respectful of private property and to request written approval from landowners prior to fishing or hunting.

4.12 Aquatic Resources

Comments requested that short and long-term effects to fisheries, including species composition, be evaluated for the North Fork of the Cache La Poudre River, downstream of the reservoirs, from the head waters of the North Fork to the mouth at the South Platte River, and specifically on the Watson Fish Rearing Unit. A comment was made requesting that the effects on fish and water temperature downstream be evaluated. The commenter did not clarify "downstream", thus it was assumed that the concern was in relation to the North Fork of the Cache La Poudre as well as the main stem of the Cache La Poudre River. Other comments were concerned about the effects on the flow through Fort Collins in relation to the aquatic resources and the water levels around the Overland Trail.

An additional comment stated that mosquito habitat along the margins of the new reservoir may increase. The concern was for an abatement plan and effect the project might have on the potential spread of West Nile Virus.

Descriptions and locations of fish habitat in terms of spawning, rearing of young, and winter holdings, as well as a description and location for macroinvertebrates were requested.

4.13 Threatened, Endangered, and Candidate Species

Comments received contained general concern regarding potential effects on threatened and endangered species. Potential impacts identified included construction, recreation, and changes in stream flow. Species specifically mentioned were the bald eagle (*Haliaeetus leucocephalus*), Ute ladies'-tresses orchid (*Spiranthes diluvialis*), Colorado butterfly plant (*Gaura neomexicana* ssp. *coloradensis*), greenback cutthroat trout (*Oncorhynchus clarki stomias*), and Mexican spotted owl (*Strix occidentalis lucida*). Concern was also expressed for species downstream in the Platte River system.

Comments requested descriptions of legally designated critical habitat and review of areas that are potential habitat for threatened or endangered species. One comment requested descriptions and locations be provided for all bald eagle nests. Two comments focused on the greenback cutthroat trout requesting a thorough review of habitats in areas affected by both reservoirs be required and documented.

4.14 Cultural Resources

Cultural resource comments expressed concern for the potential loss of important cultural sites due to inundation, specifically resources and properties related to the Standing Sioux Tribe. A comment indicated a Class III pedestrian cultural resource inventory will be required for the National Forest Service lands that will be inundated. The comment also stated that mitigation measures for sites previously recorded or discovered during survey efforts would be determined through consultation with SHPO. The USFS requested that they be involved during consultation with SHPO and the tribes.

4.15 Land Use

Comments submitted regarding land use expressed concern that continued use of the area for educational and stewardship programs would be interrupted and that trespassing would increase due to the presence of construction crews. Concerns regarding power line locations, impacts to ranching operations, and the use of land from public agencies were submitted. The National Forest Service has procedures that must be followed to request the use of National Forest Service land. A comment inquired about what would be necessary from the State and Federal Government regarding the potential property loss associated with the Cherokee State Wildlife Area. Several comments discussed the potential for effects on conservation easements including direct and cumulative effects on existing and future conservation easements, potential compensation, and the need for evaluation. One comment suggested that the HSWMP analyze coordinating water projects and land use planning to result in lesser impacts from growth to aquatic and other resources. The comment stated that use of smart growth land use principles can result in a reduction in habitat fragmentation and loss, a reduction in energy use and infrastructure costs, and a reduction in air quality impacts.

4.16 Recreation

Recreation issues generated many comments including impacts on reservoir access, whitewater recreation, fishing, and loss of recreational opportunities due to inundation. Reservoir access comments contained several issues regarding the desire for more access, less access, questions regarding how recreation would be managed/regulated, concern for

surrounding private property, types of recreation that would be available on the reservoirs, and impact of increased recreation on water quality and wildlife.

Comments regarding whitewater recreation and fishing generally dealt with the potential impact of changes in flow rates both on the North Fork and the main stem of the Cache La Poudre rivers. There were a few comments that were concerned with the direct loss of upstream fishing opportunities and the indirect effect on recreation, specifically hunting, due to the loss of access to public lands.

Additional comments expressed concern about the potential increased demand on the Livermore Fire Protection District resources because increased recreation would potentially result in increased rescues, injuries, and fires. It was suggested that emergency phones or increased cell phone coverage be provided.

4.17 Visual Resources

Comments were made regarding effects on the visual resources provided by Dale Creek and the Poudre River Corridor associated with Fort Collins. A comment inquired how the project might impact the designation of the Cache La Poudre River as a National Wild and Scenic River. A comment also suggested that the Forest Service Management Areas adjacent to the Seaman Dam be evaluated in regards to the stated Visual Quality Objectives of the Forest Plan for those areas.

4.18 Socioeconomics

Issues raised regarding socioeconomics included the potential loss of agriculture, increased growth, impacts to businesses in Fort Collins, effects on recreational fishing industry, and the impact on land values. A few comments regarding the purpose and need also addressed socioeconomic issues. These comments were concerned with the cost of the Seaman project and whether Greeley could afford the project as well as whether Weld County as the project beneficiary should fund the project. Some comments referred to the quality of life on the Front Range and the need to maintain this quality. A comment suggested incorporating hydroelectric generation at the dams.

4.19 Transportation

Transportation comments focused on the potential for modifying existing roads, increased traffic, and construction issues. Comments included a desire that existing roads not be expanded or widened in ecologically sensitive areas, that expansion or widening of access roads be minimized, and that disturbed areas be restored with native species. Some comments requested that roads be created to access lands that will be isolated by the expansion of the Seaman Reservoir. One comment requested construction of bridges to provide access. A comment also expressed concern that the project would increase the cost of maintaining new or existing facilities. Concern was expressed regarding quantifying the potential traffic increase on the existing roads and safety issues. Movement of construction vehicles and the ability to use existing roads was mentioned. One comment noted that due to inundation, a new parking lot and access road at Halligan Reservoir would be required.

4.20 Noise

A comment suggested that the hours of operation of the rock crusher be limited and coordinated with the Colorado Division of Wildlife and the Nature Conservancy to reduce disturbance during periods of critical wildlife breeding. A concern regarding the noise generated from the increased construction traffic was received.

4.21 Dam Safety

Two comments were submitted specifically regarding dam safety. The comments requested evaluation of potential flooding associated with a dam rupture resulting from a dam failure, rupture, earthquake or terrorist activity.

4.22 Cumulative Impacts

Cumulative impact comments focused primarily on the effects of this project with the other projects in the Cache La Poudre Basin, in particular the proposed Glade Reservoir. Issues raised included effects on the river system and the effect on the earthquake potential due to the cumulative weight of Halligan, Seaman, and the other proposed reservoirs. Other cumulative impact comments related to evaluating the effects of increased growth such as traffic, pollution, and the need for infrastructure. One comment stated that indirect impacts should not be dismissed unless they are analyzed and the analysis shows no indirect impacts. Additionally, concern regarding the method the Corps will use to address sustainability of resources, ecosystems, and human communities in relation to urban runoff, sewage, and effluent in the rivers as cities consume more and more of the free flowing rivers. One comment specifically requested information on sustainable water management, taking into account consideration of all the growth expected to occur with this watershed. The concept of a sustainable water supply or water management policy should be defined as the maintenance and balance of both human and ecological needs. A series of other comments questioned how data would be collected for use in evaluating the cumulative effect of projects in the Cache La Poudre watershed.

4.23 Mitigation

A comment regarding mitigation measures recommended that the EIS should include a mitigation plan that assessed environmental impact in the years that follow the completion of the project. It was also stated that the plan should be able to adjust to changes that occur and that specific information on the responsible party for implementing the mitigation be provided.

4.24 NEPA Process

Requests were made that the NEPA process be made as open and as interactive as possible. The Landowners of Phantom Canyon Ranches asked to be included and have access to meetings with various agencies. One comment presented a list of requirements that needed to be met in order for the EIS to be judged as a success. Another comment suggested that all the studies undergo scientific peer review, not just public review. One comment pointed out the benefits of merging the 404(b)(1) guideline requirements and the NEPA process, such as saving time and resources and possibly producing a better product.

4.25 General Comments

Two comments could not be identified with any of the above categories. One stated that the National Park Service Intermountain Region of the Department of the Interior lacked information to comment on how the proposed enlargements may impact Land and Water Conservation Fund (L&WCF) projects. The comment stated that there are 92 L&WCF projects in Larimer and Weld counties so the possibility of impacting a project is real. It was suggested that the project consult with the official who administers the L&WCF program in Colorado.

The second comment expressed concern over agriculture run off and use of herbicides, pesticides, healing of mother earth so that we give instead of take away from her. This comment also requested the elimination of chlorine and fluoride in tap water.

One comment was applicable to more than one of the above categories. The US Forest Service indicated that a Biological Assessment and Biological Evaluation Report without the use of synthetic data is required.

5.0 Issues to be Considered in the EIS Process

The Corps will consider comments received during the public scoping process in the preparation of the EIS. Based on the issues, comments, and recommendations received during the scoping process the following broad range of resource topics will be evaluated in the EIS. Specific resource issues to be considered will be further refined as alternatives for inclusion in the EIS are finalized.

1. Surface Water
2. Recreation
3. Wildlife
4. Fish and Aquatic Life
5. Land Use
6. Cumulative Impacts
7. Transportation
8. Socioeconomic Resources
9. Vegetation
10. Threatened, Endangered, and Candidate Species
11. Ecosystems
12. Cultural Resources
13. Wetlands and Riparian Resources
14. Visual Resources
15. Noise
16. Groundwater Resources
17. Water Rights and Water Use
18. Mitigation Measures
19. Air Quality
20. Soils
21. Dam Safety

6.0 Summary of Future Actions

The information collected during the scoping process will assist the Corps in the development of alternatives for the Draft EIS. Although the official scoping process has ended, additional opportunity for public involvement will occur when the Draft EIS is released. Additional meetings, updates, etc. may also be conducted as needed or requested.

A copy of this report may be found at <http://www.halligan-seaman.com> and <http://www.nwo.usace.army.mil/html/od-tl/eis-info.htm>. For information and updates about the planning process, visit the mentioned web sites. Additional comments, questions, or concerns, at any time during the planning process, can be directed to:

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7.0 Project Update

The City of Greeley was informed by WSSC and the city of Evans that they would no longer participate in the HSWMP. WSSC basically stated they were no longer interested in pursuing this venture to meet their needs. Evans indicated that they are unable to participate due to manpower and fiscal concerns.