

Project Management Plan

2006 Spring Runoff Event – Kootenai/Kootenay River Basin

After Action Report (AAR)

1. Purpose. The purpose of the U.S. Army Corps of Engineers (“Corps”) After Action Report (AAR) is to summarize the facts leading up to, during, and following the 2006 Spring Runoff Event (2006 Event) in the Kootenai/Kootenay River Basin. This AAR is a requirement of the Corps’ Engineer Regulation ER- 500-1-1 for events that either:

(a) Involve over \$500,000 in total Flood Control Coastal Emergency expenditures (Total expenditures for this event are over \$1.5 million) from the Corps of Engineers, or

(b) Any other event directed by the Major Subordinate Command (MSC) or Headquarters, U.S. Army Corps of Engineers (HQUSACE)..

This AAR will be an assessment of the 2006 Event at Libby Dam, MT, and is intended to inform Corps management, and all interested parties as to the facts, and Corps processes involved in the 2006 Event, such as:

Libby Dam water management decisions in 2006 prior, during and after the 2006 Event, and

In activating the Emergency Operations Center (EOC) and responding to requests for emergency assistance in the Kootenai River downstream of Libby Dam.

The AAR’s assessment will include a summary of the coordination that took place during the 2006 Event between Corps staff at the Northwestern Division office in Portland (“NWD”), the Seattle District office, and Libby Dam, as well as between federal, state, and local entities. It is intended to promote an understanding of the overall process for the 2006 Spring Runoff event. The AAR will present the facts about the 2006 Event, lessons learned, and recommendations for the Corps in the future.

2. Objective. The objective of this AAR is to report a consolidated historical record of pertinent information on the situation prior, during, and after the 2006 Event. This information is intended to be used to assess what occurred, and, if applicable, to modify Emergency Management Operations, Water Management processes and Communications activities of the Corps.

3. Scope. To the maximum extent feasible, information included in this record should be specific to the 2006 Event. Background information on climatology, meteorology, hydrology, basin descriptions, and historical information on previous events will be limited to that essential to inform the analysis and documentation of the 2006 Event. The AAR will include all pertinent aspects of the 2006 Spring Runoff Event, including: a discussion of the emergency response, Water Management operations of Libby Dam and communications

activities. The emergency response discussion will include the types of emergency management assistance provided, coordination with other federal, state, and local agencies, effectiveness of the response including damages prevented by local flood fight operations. The Water Management discussion will include hydrologic and meteorologic conditions, and water management for 2006 operations. The Coordination/ Communications discussions will include existing pathways for communications, internal and external to the Corps. The report will include Lessons Learned from the 2006 Event. The end product will include a report and data files of the 2006 Event suitable for use by professionals and managers with varying technical backgrounds. A greater level of technical detail will be provided in the appendices.

4. Project Management. The Corps Seattle District will provide project management and integrate input from other Corps offices, federal and state agencies and local stakeholders and publish the final AAR. Given the extent to which Libby operations for water management is integrated into the overall Columbia River system operations, the Water Management portion of the AAR will be jointly managed between Corps staff at the Northwestern Division office and the Seattle District office. The report will be staffed and coordinated with the Northwestern Division office.
5. Major Topics. The following are major topics to be covered in sections of the AAR:

A. Executive Summary

B. Water Management

- a) Libby Project Purpose and Authorization, International Joint Commission (IJC), and Columbia River Treaty
- b) Kootenai Basin and Columbia Basin System Description
 - i. Downstream levee system, including history of levee conditions and National Weather Service flood stage.
- c) 2006 Water Management
 - i. Libby Water Control Plan
 - ii. Columbia Basin Water Management Plan
 - iii. Roles and Responsibilities of Corps offices at the Northwestern Division office and the Seattle District office, as well as at Libby Dam
 - iv. Data
 - v. Other – to be determined
- d) 2006 Event Specific Information
 - i. Regional description of 2006 Event.
 - ii. Description of hydrologic response, including information such as discharge exceedence data, frequency estimates at key locations, and other related information. Hydrographs will be provided for locations where rivers approached/exceeded flood stage. This section will describe the 2006 Event in relationship to other historical runoff conditions or frequency curves that are available.

iii. Summary of water management of Libby Dam, including observed inflows to Lake Koocanusa, outflows from Libby Dam and reservoir elevations, and analysis of this year's implementation of VAR-Q.

iv. General description of damages prevented. Use standard calculation of one hydrologic peak per water year. Need to discuss how to approach agricultural impacts and secondary peaks.

e) NRCS (Natural Resources Conservation Service) Data

- a. Snotel sites
- b. Water Supply forecast
- c. Canadian sites

f) Communications within the Corps and from the Corps to the public

C. National Weather Service Northwest River Forecast Center [Information will be obtained from River Forecast Center]

a) Meteorology: Describe meteorology (including temperature and precipitation) preceding and during the 2006 Event.

b) Provide description of flow forecasts during the 2006 Event, and the Corps will describe how these were used in water management decisions.

c) Meteorologic and hydrologic data received from Canadian sites used in River Forecast Center tools

- d) Additional forecasting tools
- e) Communications with Public

D. Emergency Management within the Corps of Engineers

a) Office activities

- i. Communications – Internal / External to the Corps at the Seattle District
- ii. Emergency Operations Management

b) Field operations - flood fight response

i. Describe activities by local agencies and activities by national and state agencies.

- ii. Description of Corps activities
- iii. Post Emergency Activities environmental coordination

c) Flood Damages prevented by Emergency Operations

i. Describe activities to prevent or minimize damage in basins where major streams approached/exceeded flood stage

ii. Monetary or generalized estimates of damages prevented (where available) by local flood fight

- iii. Description and estimate of damages to the basin below Libby Dam

d) Contracting activities

e) Flood recovery assistance

- i. Specify counties declared federal disaster areas
- ii. Describe damage recovery assistance provided

E. Dam Safety Program

- a) Description and estimate of damages to Libby Dam

F. Lessons Learned

G. Summary and Conclusion

H. Commanders Assessments

6. Product Delivery Team. The Product Delivery Team will be made up of individuals from Seattle District and Northwestern Division offices. Individuals will be from Program and Project Management, Water Management, Emergency Management, Project Operations, Public Affairs Office, Office of Counsell, Environmental Resources.

7. Products and Goals

- a) The AAR needs to be fact based to describe what happened, when, and why.
- b) The AAR will inform other forums and policies regarding the operation of Libby Dam and coordination with the operation of other Columbia Basin reservoirs..
- c) The AAR must be based on sound engineering and scientifically supportable information.
- d) The AAR will clearly define the Lessons Learned and how they will be applied.
- e) The AAR will be completed in an efficient and expedient manner.

8. Communications

Communications will play a critical role in our ability to get the facts out, and allow evaluation by all. The Corps will speak with one voice, and have a clear communication plan.

The Public Affairs Office (PAO) will have lead in preparing and implementing communications. PAO activities will include assisting in the development of a web site to solicit input from the public, coordination with the media, development of news releases and editorial boards, scheduling and conducting Public Meetings. They will organize and help facilitate discussions and follow-on correspondence.

Purpose of Public meetings is to:

- a) Communicate the results of the AAR to the Public, local stakeholders
- b) Allow public to express their views and concerns in response to the 2006 event
- c) Get public input once the AAR is completed

9. Schedule.

Activity	Due Date
1. Draft PMP	July 7, 2006
2. Final PMP	August 4, 2006
4. AAR Critique session (Internal to the Corps of Engineers)	21 August, 2006
5. Draft AAR	August 31, 2006
6. Stakeholder Meeting – Present summary of event	September 6, 2006 (Tent.)
7. Final AAR	October, 2006
8. Public Meeting – Present findings (Before the Public Mtg, meet with public officials, stakeholders and congressional)	TBD
9. Distribute final report.	October, 2006

10. Quality. All products and design will be reviewed by a technical in-house Corps team. Following final review, the Corps District and Division leaders will be briefed on the Report prior to it their being made available to the Public.

11. Questions. Questions regarding this PMP and the AAR process should be directed to Lester Soule, Chief Civil Projects Branch, Seattle District at www.lester.e.soule@usace.army.mil or 206-764-3699