

Glen Canyon Dam Adaptive Management Work Group
Agenda Item Information
March 7-8, 2006

Agenda Item

Selective Withdrawal Structure

Action Requested

√ Feedback requested from AMWG members.

Presenter

Darryl Beckmann, Deputy Regional Director, Bureau of Reclamation

Previous Action Taken

√ By AMWG:

The following motion was approved on August 13, 2003:

Recommend to the Secretary of the Interior to direct the Bureau of Reclamation to expeditiously complete the NEPA process for implementation of the TCD.

The AMWG heard an update on the Selective Withdrawal Structure at its last meeting in August 2005.

√ By TWG:

The following motion was passed by TWG at its January 25-26, 2006, meeting: TWG recommends Reclamation completes compliance on the Temperature Control Device as soon as possible.

Relevant Science

√ The following describes the relevant research or monitoring on this subject:

A draft environmental assessment summarizing existing knowledge was released in January 1999. Workshops attended by scientists and managers were convened in 1999 and 2001 to identify additional science needs for the selective withdrawal. Science Advisors completed a risk assessment in July 2003.

Background Information

√ Following is an outline of my presentation:

Background

In August 2003, the Science Advisors presented results of a risk assessment on a selective withdrawal for Glen Canyon Dam. That assessment led AMWG to recommend that Reclamation initiate NEPA compliance on a two-unit selective withdrawal. The Denver Technical Service Center (TSC) provided an estimate of \$80 million for an external frame design that would deliver warm water from reservoir elevations ranging from full pool (3700 ft) to just above the penstocks (3510 ft). Because that cost was considered too high to support a test on two units, Reclamation asked the TSC to go back and provide other options in the range of a \$30-40 million.

Update

TSC provided a report on two designs that meet these cost limitations, controlled overdraw and a stacked external frame, in October 2005. These designs would operate in a range of reservoir elevations from 3670 ft to 3600 ft. They also have reduced design lives and earthquake resistance from the original external frame. Reclamation has asked TSC to determine whether modification of these designs to improve the range of operation to intermediate levels would result in significant cost savings. This information will be reported at the AMWG meeting.