Brian Dunnigan

From: Mike Thompson [MThompson@dnr.state.ne.us]
Sent: Tuesday, October 12, 2004 12:36 PM
To: Mark Noble
Cc: Pat Diederich; Brian Dunnigan; Dennis Hurtz; Mike Munson
Subject: RE: Selection and survey methods of the Republican River Basin dams

Mark,

I understand your frustration with this assignment. I apologize for the delayed response. I took an unexpected path through politics last week. I trust your engineering judgment and will abide by any selection criteria you and your colleagues choose. I will be out of the office until Friday. That cuts severely into planning time for next week. Unfortunately I have not had time to finish editing the water body files yet. Perhaps I could get Ryan's help again. I am open to any suggestions you might have on how to breath life back into this project. I'll see if you are in your office this afternoon and we can at least decide about what we do or don't do next week.

Sincerely,

Mike

-----Original Message-----
From: Mark Noble [mailto:mnoble@dnr.state.ne.us]
Sent: Wednesday, October 06, 2004 11:45 AM
To: Mike Thompson
Cc: Pat Diederich; Brian Dunnigan; Dennis Hurtz; Mike Munson
Subject: Selection and survey methods of the Republican River Basin dams

Mike,

We need to determine which 40 dams, or so, that we plan to investigate in the Republican River basin. We probably should document why those dams were selected.

I am not comfortable just doing windshield estimations to determine the surface areas of the reservoirs. I would prefer to gather rough survey data of points outlining each reservoir. Brian Dunnigan suggested using a hand-held GPS unit since we do not need elevation information (each point will be taken at the water surface). We will have to document, however, the water level of each reservoir relative to the principal spillway inlet.

We could also gather data on reservoir depths. Pat Diederich mentioned that the Corps of Engineers has developed a new fishing bobber that will provide water depths accurate to within 0.5 foot.

When can you, Pat, and I get together to figure out which dams we want to look at, and the exact type of information we want to gather at each site?

Mark

TOPIC: Reservoirs In The Republican Basin

DATE: 8/26/04

FILE UNDER:

PAGE:

Mike T., Mark N.

Do Guide Rock the downstream limit?
Mike will work on this.

Since last time:
- Not all water bodies show up on SSURGO - ? May have been individually digitized.
- 3 datasets
  - Josh's NHD information - KS information not available
  - Ponds digitized by Flatwater

Ryan tafged polygons from Dam ID based on 1993 photo.

Mike may have to ask about each set of data - meta data lite.

Couple the field survey w/ recon trip. Those that will be surveyed

- Capacity and area will be estimated based on photos and location.
- Principal spillway elevation est. off 7 1/2" quads.

Work Plan

Flatwater →
- Merge 3 datasets
- Assign elev. of dam Crest from DEG
- Assign dam ID

With Workplan and submit to management by mid-Sept

Contact NRCS for sedimentation estimates.

- Get work to Flatwater - Finish late Sept-Early Oct.
- Mike, Mark Brad Field Survey 4-10 days Sept Oct
- Actual Field Survey of <9 dams November
- Apply Sedimentation Rules to est. capacity
- Finalize Dataset - Nov. Dec. Need capacity w/ polygons

— Write report
— Plan for future work

200 Acre Ft criteria question
Mark will look at this
Mark, Brian, Mike will meet
w/ Roger and Ann to
address issue.

~~Keep~~ Meet on Sept 3.