

Decommissioning and Site Restoration of Non-Federal Hydroelectric Projects

John A. Schnagl

Federal Energy Regulatory
Commission

(202) 219-2661

Federal Energy Regulatory Commission

Regulates non-federal hydroelectric facilities.

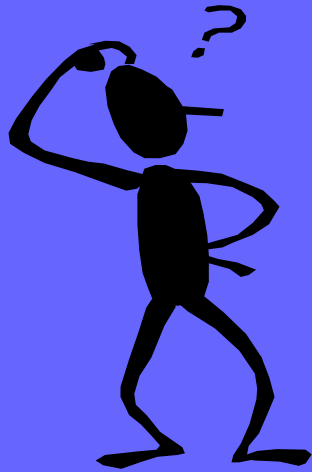
- Project construction and operation
- Minimum flows
- Reservoir levels
- Fish passage
- Recreational access
- Historic preservation

Decommissioning

Decommissioning can occur when a license holder wants to give back its license or

FERC determines, at the end of the license term, not to issue a new license.

Result: **FERC no longer has regulatory authority over the project site.**



Why Decommission?

Commission's 1994 policy statement

Why would someone with a license want to give it up?

Overwhelming reason is

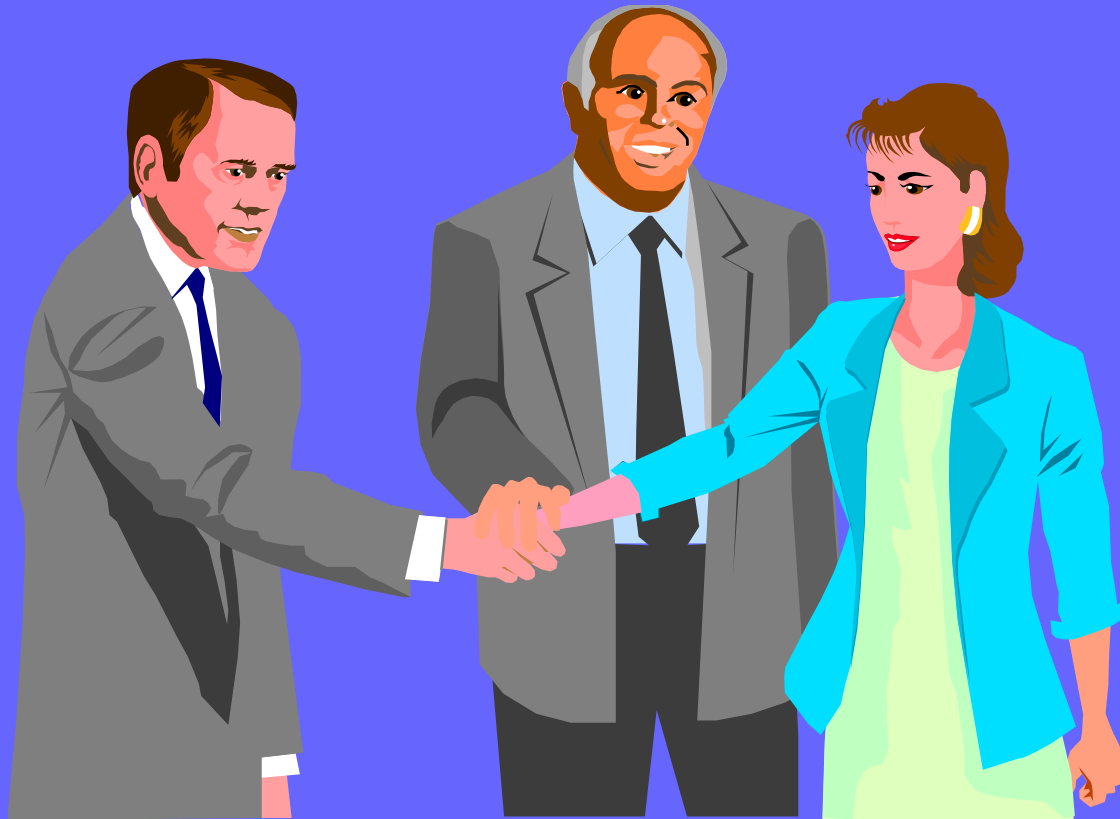
Economic

- High cost of maintaining aging dams
- Increased cost of environmental mitigation
- Decreasing/unpredictable energy prices

also

Agreements

Licensees agreeing to remove one dam
to relicense other dams



Decommissioning and site restoration options

Close the door and turn off the lights

to

Dam removal and site restoration.

Determining what is appropriate

- Licensee's proposal, public comments and agency recommendations
- Future use of the site
- Environmental issues
- Dam safety
- Public safety

What is the Commission's role?

- Inform the public
- Obtain comments and recommendations
- Conduct public meetings (NEPA process)
- Maintain public and environmental safety
- Determine if decommissioning is in the best public interest
- Provide for appropriate regulatory transition

Three Dams

Edwards Dam Augusta, Maine

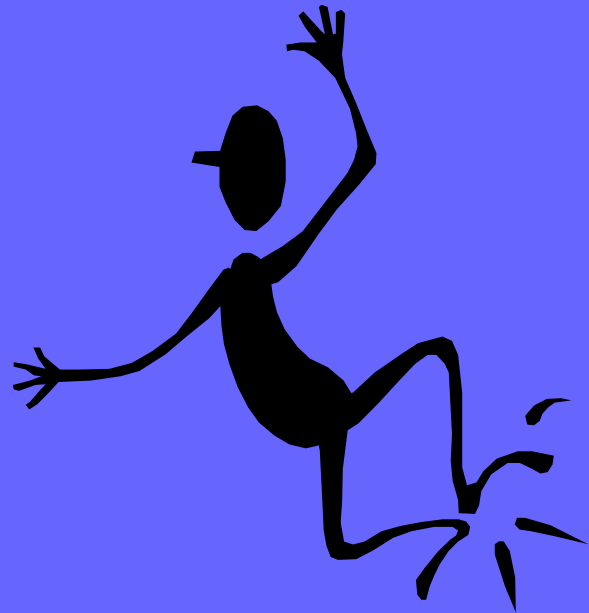
Mussers Dam Sellinsgrove, PA

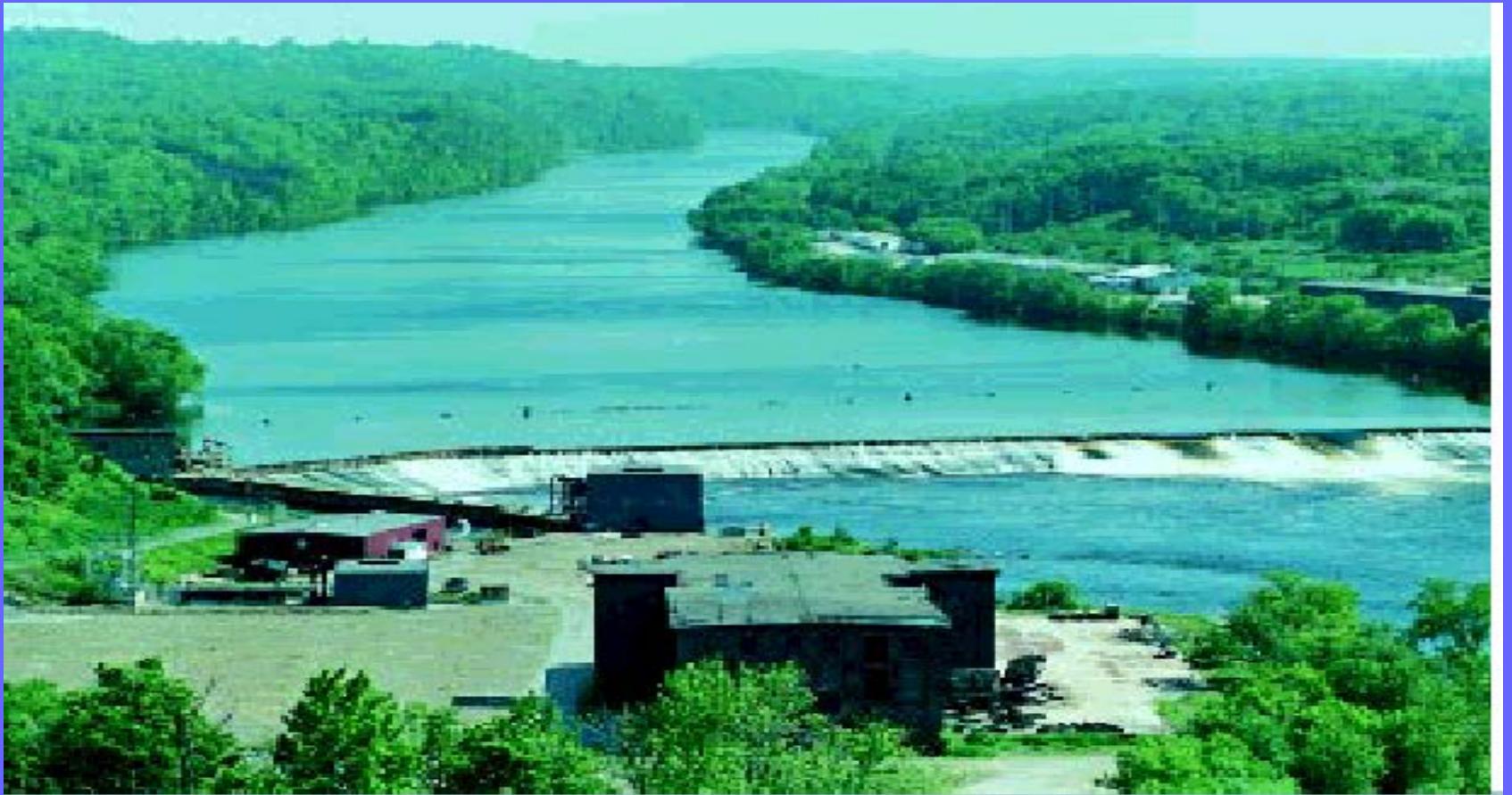
Fort Edwards Dam, New York

Edwards Dam

on the Kennebec River in
Augusta, Maine (1837-1999)

Excellent example of
collaborative problem
solving.





Edwards Dam Augusta, Maine

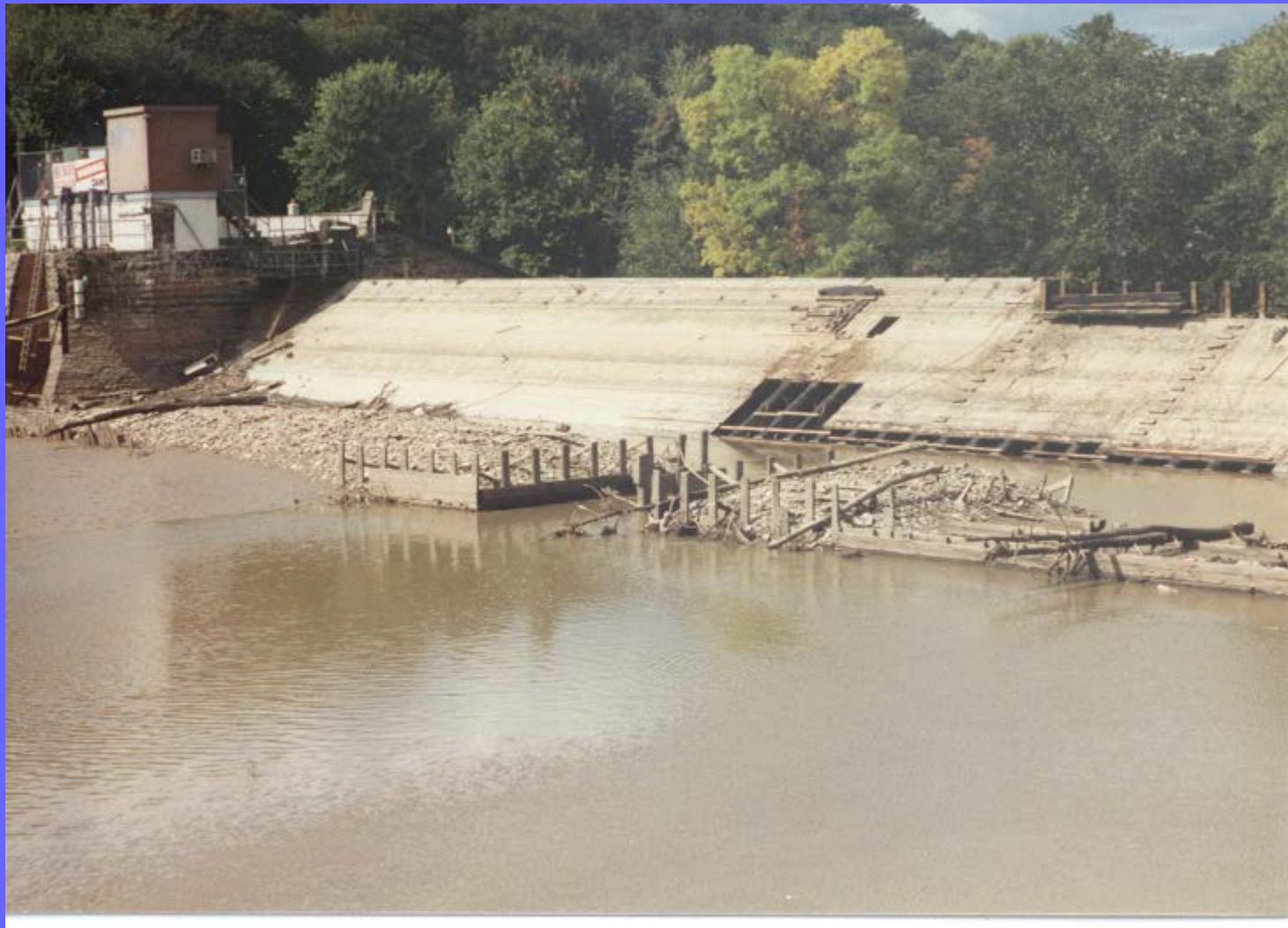
Mussers Dam, Pennsylvania 1992

Dam Safety Concerns

Mobilization of 15% of the total accumulated sediment (140,000 cubic yards)

Extensive fall seeding

Selective removal of project facilities

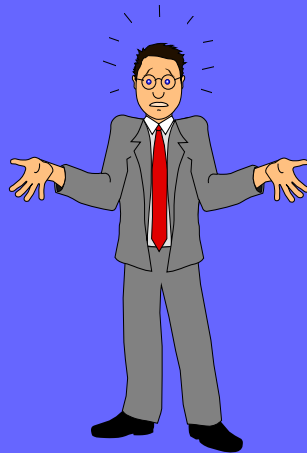


Mussers Dam, Pennsylvania

Fort Edwards Dam in New York (1973)

FERC authorized dam removal

700,000 cubic yards of PCB laden sediment
contaminated the downstream Hudson River



WHAT HAPPENED?

After 12 years of litigation and finger pointing, this we know.

Sediment sampling was conducted.

Analyses for PCB were negative.

Sediment sampling was flawed

Why did it happen?

It was inevitable,

- Those conducting the impact analysis did not have the technical expertise to anticipate the consequences of dam removal.
- Analysts had no idea of the magnitude of the PCB contamination upstream or of the limitations of the sediment sampling procedures.

LESSONS LEARNED FROM NUMEROUS DECOMMISSIONING ACTIONS:

Accurately evaluating impacts of dam removal is not easy; even small dams can pose unique challenges.

For all but the smallest dams, multi-disciplinary expert teams are essential to adequately evaluate impacts.

There will be surprises.

Cooperative support and expertise from other federal and state agencies, and non-governmental organizations is very important to keep surprises from becoming insurmountable obstacles.

Luck helps, but it can't replace careful preparation, seasoned expertise, and attention to detail.

