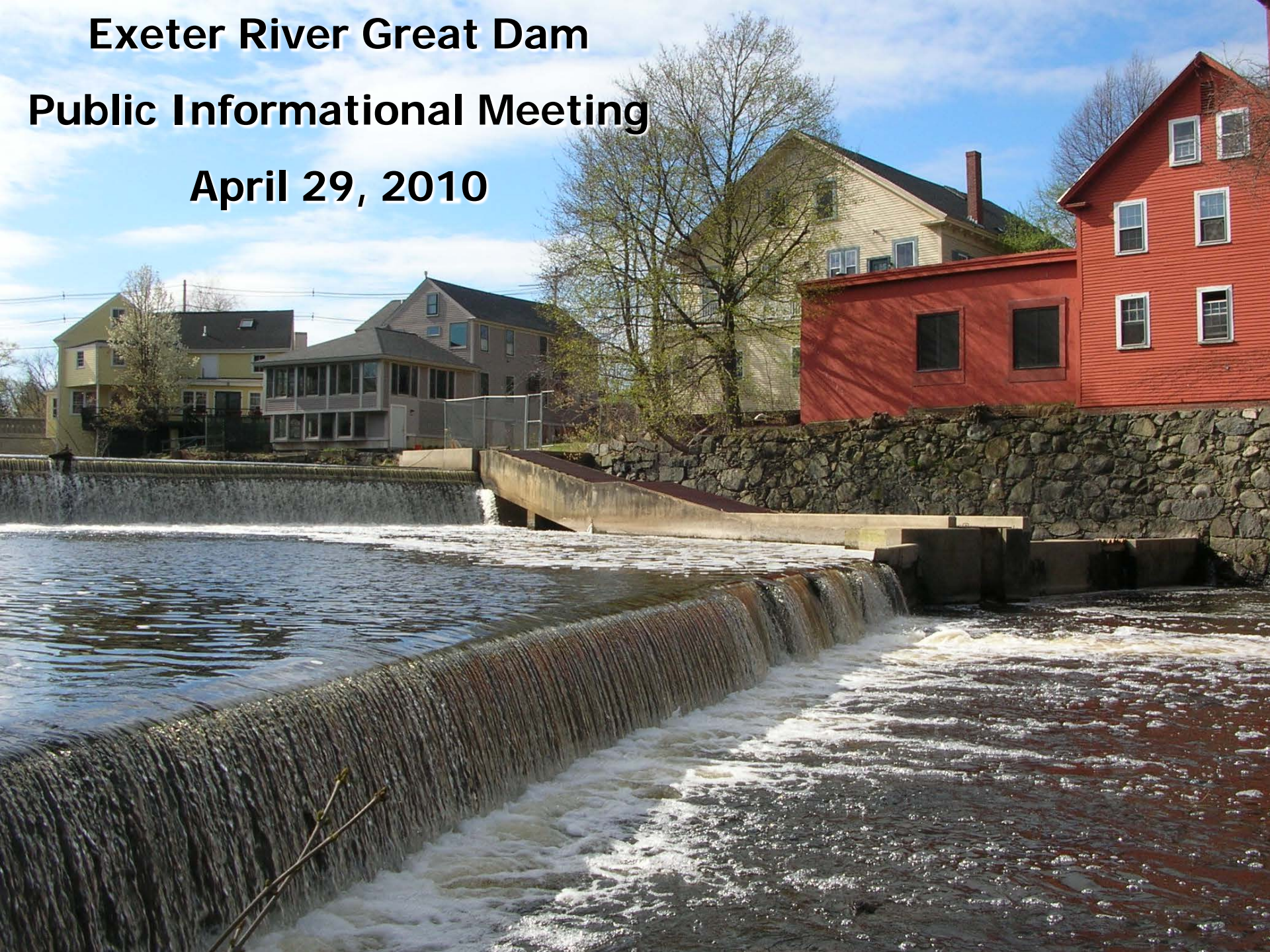


**Exeter River Great Dam**  
**Public Informational Meeting**  
**April 29, 2010**





# Exeter River Great Dam Removal Impact Study Issue Identification Workshop

PURPOSE: Obtain information about the public's questions, concerns, issues and knowledge to inform the design of the Dam Removal Option Study.

- This design forms the content specifications that will be incorporated into the Request For Proposals.

# Sponsors

## Exeter River Study Committee (ERSC):

**Lionel Ingram, Chair; Matt Quandt, Mimi Becker, Paul Wakeman  
Pete Richardson, Frank Patterson, Virginia Raub, Rod Bourdon,  
Jennifer Perry, and Kristin Murphy.**

## Exeter River Study Work Group (ERSWG):

**Co-Chairs: Mimi Becker, ERSC & Deb Loiselle, DES  
Roger Wakeman, Sally Soule, Ted Diers, Paul Vlasich, and  
Patrick Seekamp**

## Rockingham Planning Commission (RPC):

**Theresa Walker, Facilitator**

# Context for Dam Removal Study

- Previous Studies - Other Aspects, Options
- Voters Approved Dam Removal Study March 2010
- ERSC Commitment to Informed & Engaged Public
- Goal: identify issues, concerns, questions for study, information to be shared—NOT to debate them now—that's for later in decision process

# Agenda Review

Meeting Purpose and Process: Theresa Walker

Briefing: Paul Vlasich, Exeter DPW  
Deb Loiselle, NH DES

Facilitated Small Group Discussions: All

Summary of Results: Theresa Walker





# Modification Study

- **2000 – Letter of Deficiency**

  - Discharge capacity

    - 50-Year Storm event with 1 FT of freeboard

  - Operation and maintenance plan

  - Brush

- **Consultant**

  - Structural inspection

  - Water Quality

    - Temperature and Dissolved Oxygen

  - Modification concepts

  - Hydrology study and Hydraulic analysis

  - Scour downstream

  - Costs

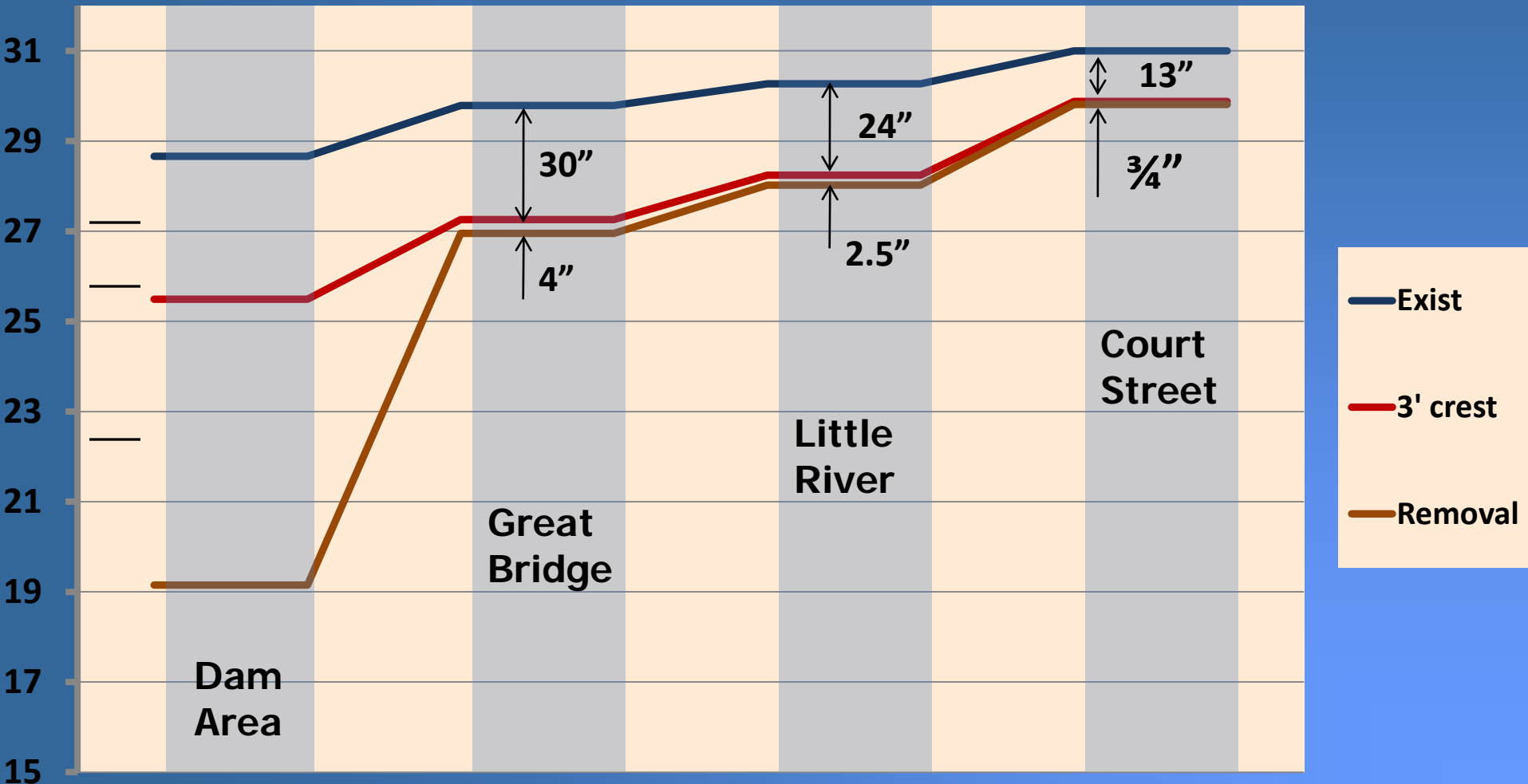


# Dam Modification Concepts





# Water Surface Elev. 50-YR Storm (4,400 CFS)



# Dam Modification Estimates

1 ft spillway gate, 8x16 tainter gate	\$1.14M
3 ft spillway gate, 8x8 sluice gate	<b>\$1.27M*</b>
Labyrinth Crest, 8x8 sluice gate	\$1.62M
Dam removal	\$0.96M

# Water Supply

- **Water Supply Alternative Study**

Effect on water supply if dam removed?

What mitigation is possible for removal of impoundment?

Costs?

- **Groundwater option**

Integrated water supply options currently under study

Diversification of water supply options

Alternate supplies mechanical problems or contamination



# Water Supply

- **Gilman and Stadium wells**

  - 1 MGD potential

  - Iron / Manganese treatment – Lary Ln well

- **Nov 2009 Impoundment drawdown**

  - Effect on groundwater?

  - Effect on current river intake system?

  - Impoundment and appearance of river.

# Costs to Mitigate Effects of Dam Removal

River Intake and Station Upgrades	\$0.75 to \$1.0 Mil.
Reservoir Aeration Upgrade	\$0.05 to \$0.10 mil.
Replace Founders Park Dry Hydrant	\$0.125 to \$0.250 mil.
Lower PEA Intake and pump station	\$0.10 to \$0.25 mil.
Exeter Mills – Retrofit irrigation, fire suppression & cooling system	\$0.25 to \$0.50 mil.
Gilman, Stadium and Lary Ln Well – equip, piping, groundwater treatment	\$5.08 to \$6.8 mil.
<b>Total Estimate</b>	<b>\$7.08 to \$8.90 mil.</b>







# Exeter River Great Dam – Dam Removal Impact Study

## Request For Proposal (RFP) Process and Timeline

**Purpose and Development of the RFP**

**Advertisement and approval Process**

**Timeline for work completion**

**Public education and outreach**

# Exeter River Great Dam – Dam Removal Impact Study

## Request For Proposal (RFP) Outline

### **EXISTING DATA COLLECTION and REVIEW**

- Studies that have been completed
- Property lines
- NHDES Dam files
- Town of Exeter files

### **FIELD SURVEY and BASE MAPPING**

- Existing conditions survey of dam, adjacent structures, utilities, and other
- Wetland boundaries
- Longitudinal profile and cross-sections

## **HISTORIC RESOURCE ASSESSMENT**

- Architectural resources
- Archaeological resources

## **SEDIMENT EVALUATION**

- Sediment quantity
- Sediment quality
- Sediment transport and management

## **HYDROLOGY and HYDRAULICS ANALYSIS**

- Hydrology study
- Hydraulic analysis
- Scour analysis
- Ice impact analysis
- Flooding



## **OTHER ISSUES OF IMPORTANCE**

- Fish passage
- Infrastructure impacts
- Listed species and other wildlife
- Recreational usage
- Invasive species
- Fire suppression and air conditional usage

## **OUTREACH and EDUCATION COORDINATION MEETINGS**

- Public Informational Meetings (3)
- Project progress meetings (6 minimum)

## **COST and TIMELINE**

- Dam removal
- Further analysis of existing issues
- Additional identified issues

# DAM REMOVAL IMPACT STUDY PREPARATION

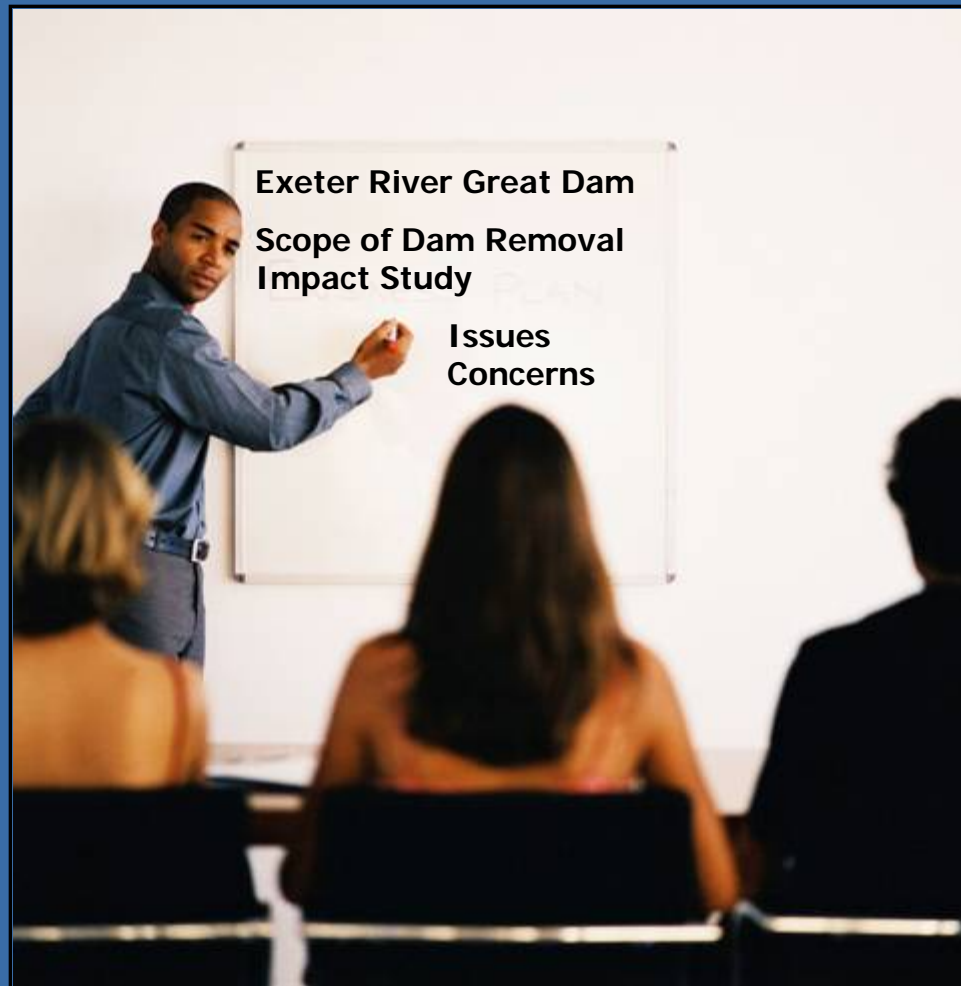
- Draft
- Final



Other issues or items to be addressed in the RFP???

Concerns and available information on the dam???

# Small Group Discussion



# NEXT STEPS

- RPC integrates results from tonight into a report, submits to ERSWG by 5/7
- Working group (ERSWP) integrates citizen input into RFP and transmits to ERSC
- ERSC reviews and facilitates RFP issuance
- Consultant selected and study begins
- More public engagement as study proceeds