



Waterbury Hydroelectric Project:

Water Quality Certification

Public Informational Meeting

October 7, 2014



Waterbury Hydroelectric Project

- Operated by GMP since 1953
 - 5.5 Megawatt Project
 - Pre federal Clean Water Act (1972)
- License expired 2001
- GMP continues to operate project under annual extensions

Little River Flow Changes From Hydropeaking

Low Flow

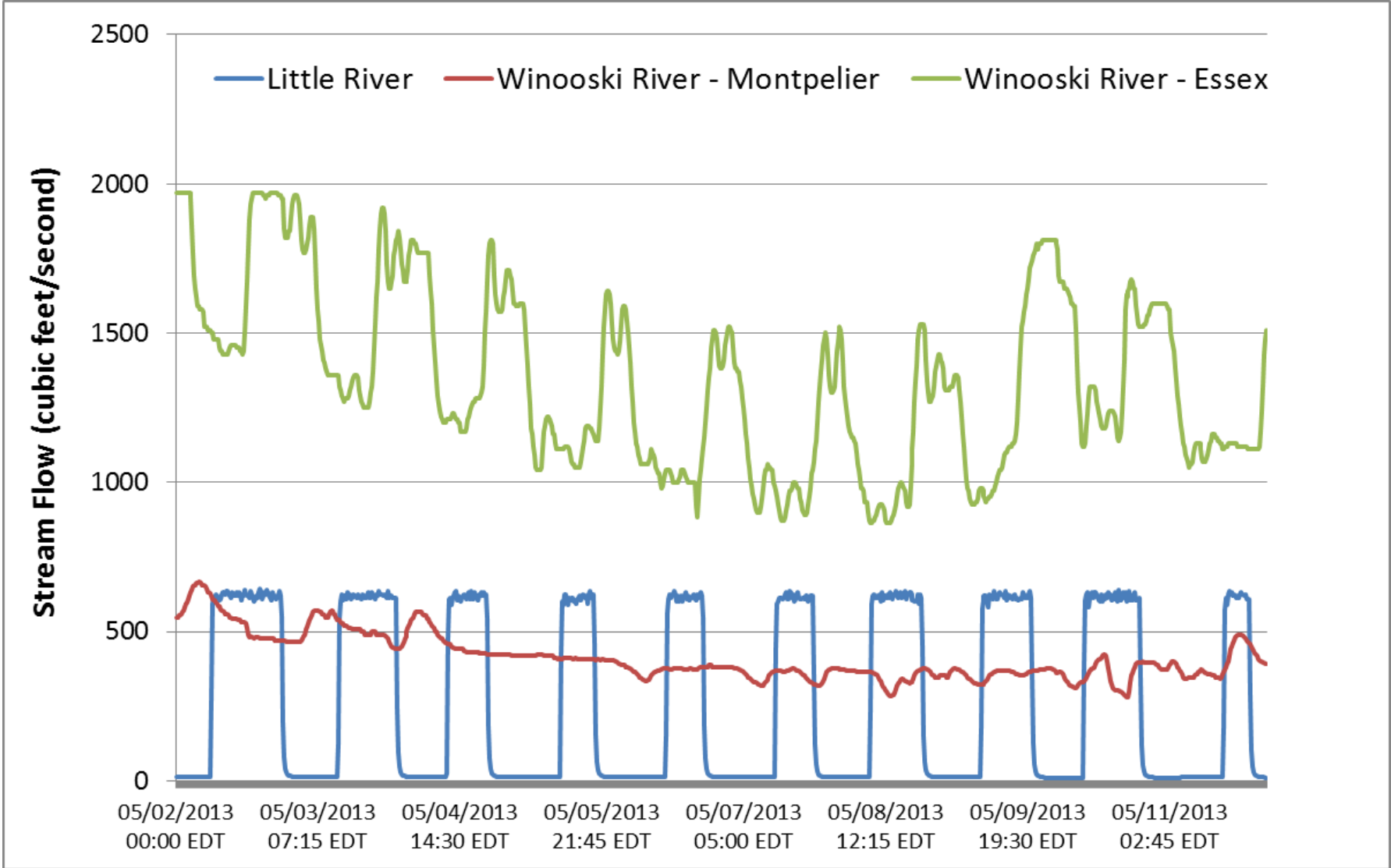


Generation Flow



Winooski – Little River Flows

May 2 – 11, 2013

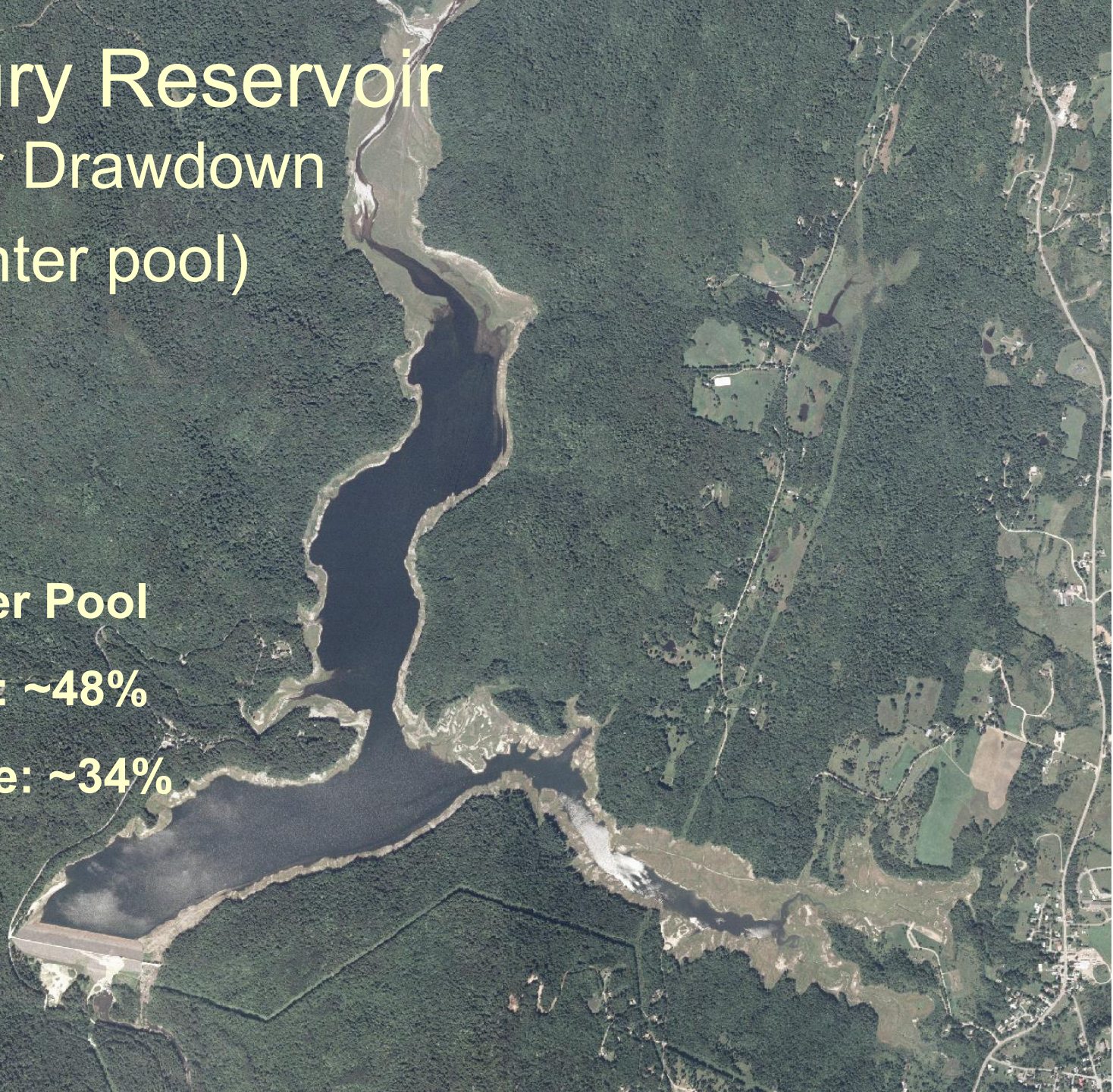


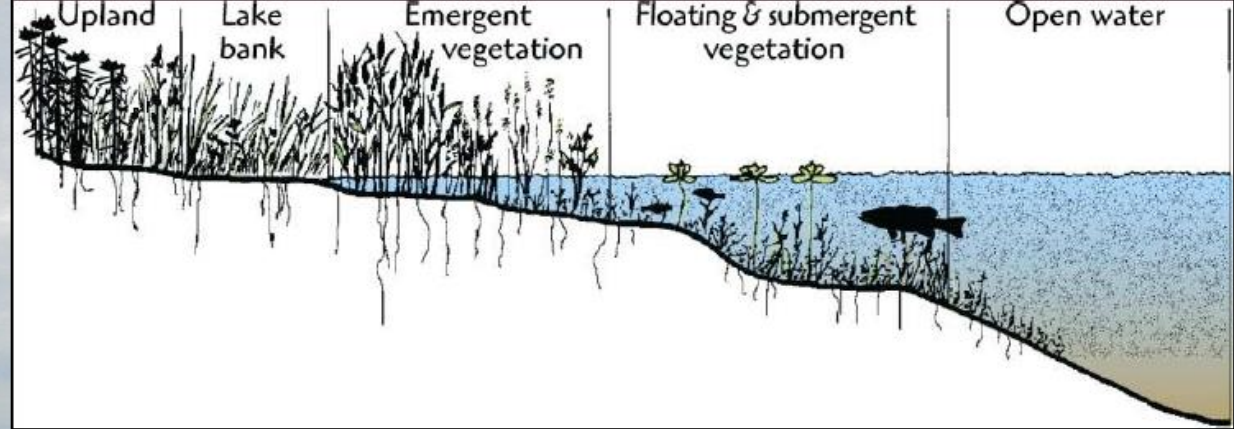
Waterbury Reservoir

Winter Drawdown (winter pool)

Winter/Summer Pool

- Surface area: ~48%
- Water volume: ~34%





Shoreline Erosion



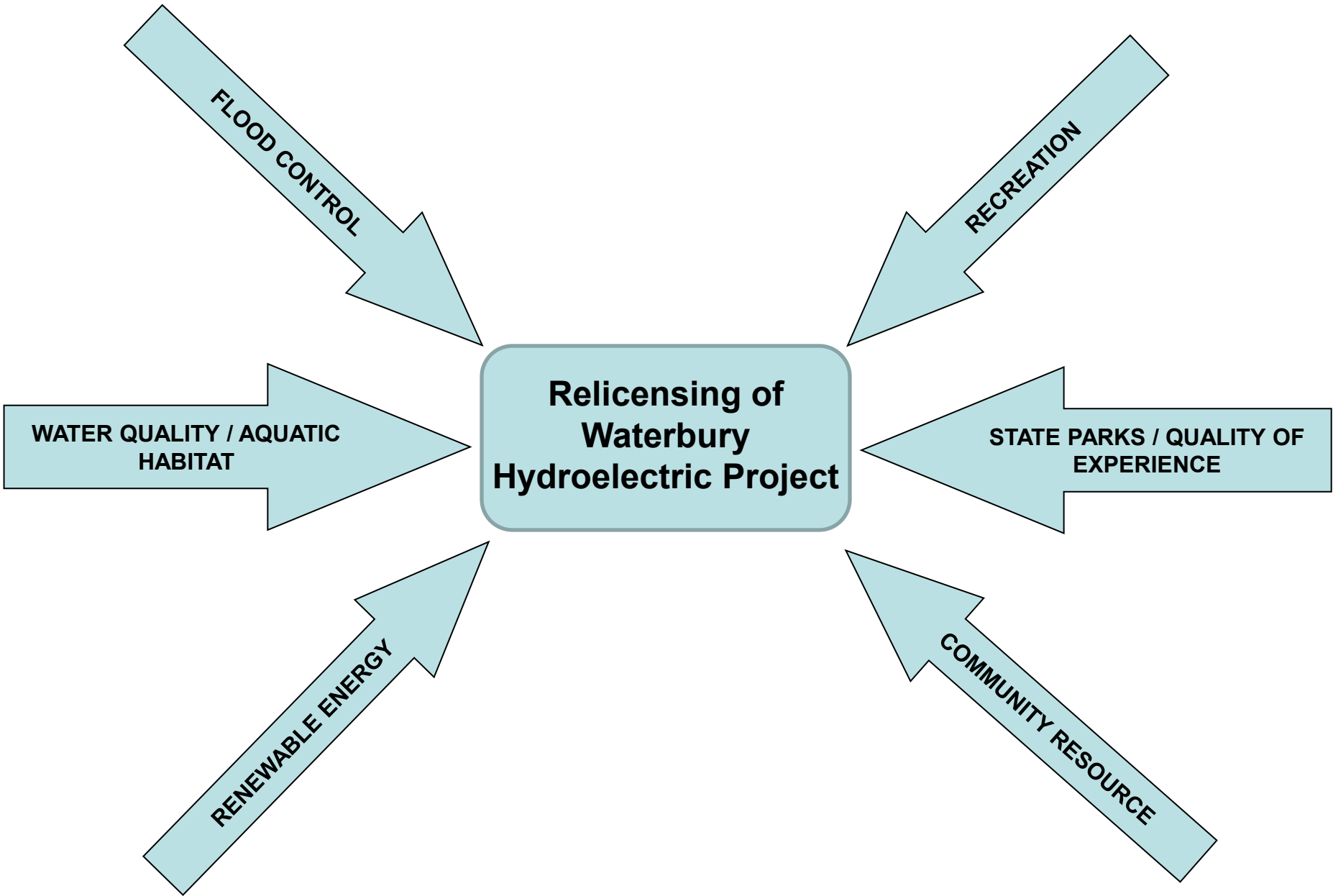


Tributary Access:
Brown Trout Spawning – Fall
Rainbow Smelt Spawning – Spring

Cotton Brook

Nov 16, 2010

Elev 585.2'



ANR Water Quality Certification Proposals



ANR Preferred Proposal

- Reservoir Target Level: Summer Recreation Level (589.5 feet elevation)





ANR Preferred Proposal

- Reservoir Target Level: Summer Recreation Level (589.5 feet elevation)
- Downstream Flow: Stable & Natural flows
- Criteria for drawdown to address extreme weather events



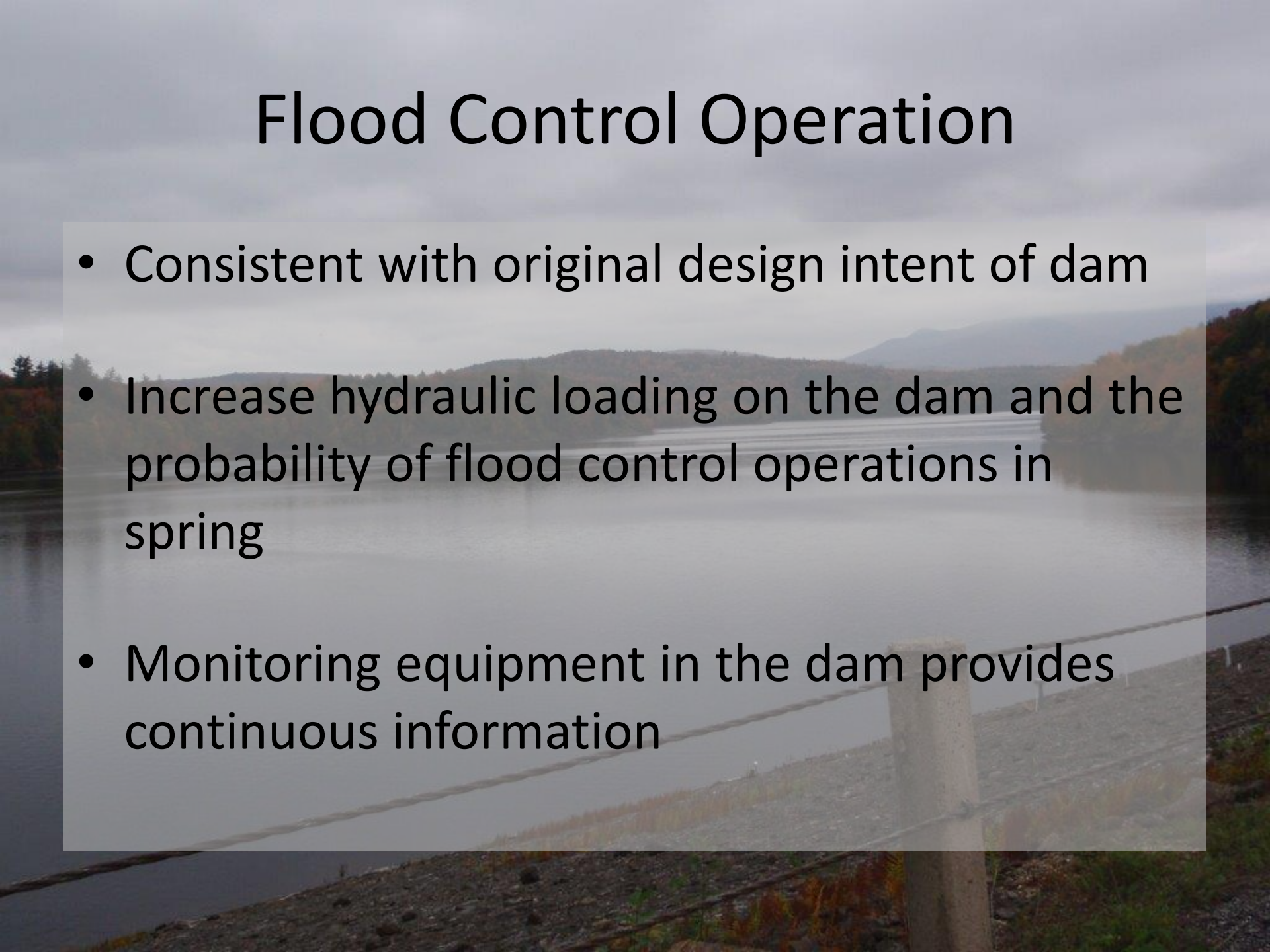
Target Level 589.5 feet with Trigger Criteria for Drawdown

- Severe storm events (Tropical Storm Irene)

Criteria for Drawdown



Flood Control Operation

The background image shows a wide, calm reservoir or lake. In the distance, there are rolling hills and mountains under a grey, overcast sky. The water reflects the light from the sky. In the foreground, a concrete post and some wires are visible, suggesting the viewer is looking from a vantage point near the dam or a nearby road.

- Consistent with original design intent of dam
- Increase hydraulic loading on the dam and the probability of flood control operations in spring
- Monitoring equipment in the dam provides continuous information

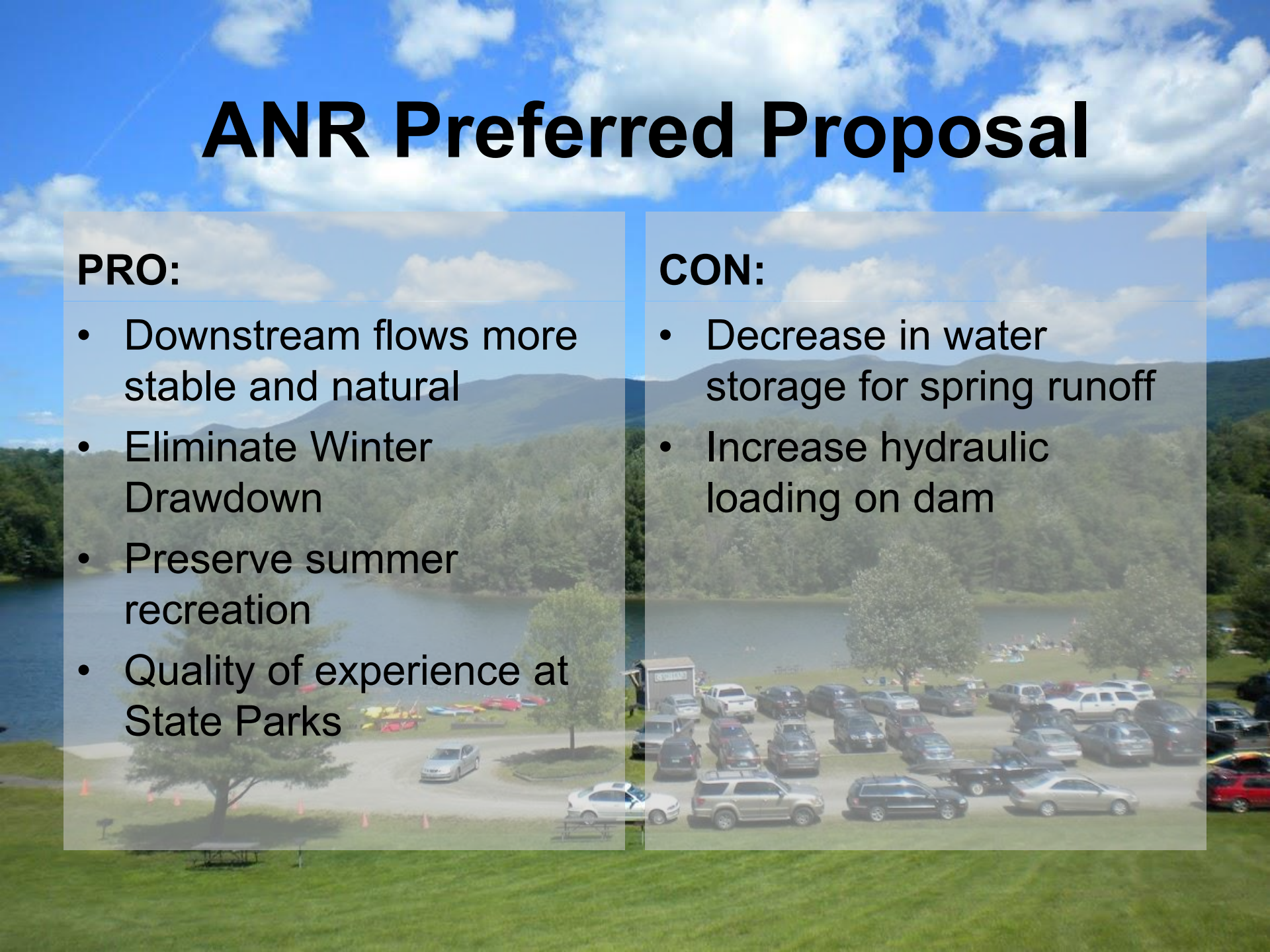
ANR Preferred Proposal

PRO:

- Downstream flows more stable and natural
- Eliminate Winter Drawdown
- Preserve summer recreation
- Quality of experience at State Parks

CON:

- Decrease in water storage for spring runoff
- Increase hydraulic loading on dam



ANR Alternative Proposal

- Reservoir Target Level: Winter pool elevation (550 feet elevation)
- Allows for significant amount of flood storage
- Reduced hydraulic loading on the dam

08.14.2006

Blush Hill Access



Waterski Course



Elephant's Rock



Remote Campsites



Waterbury Center State Park





Little River State Park



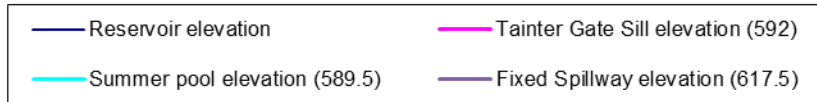
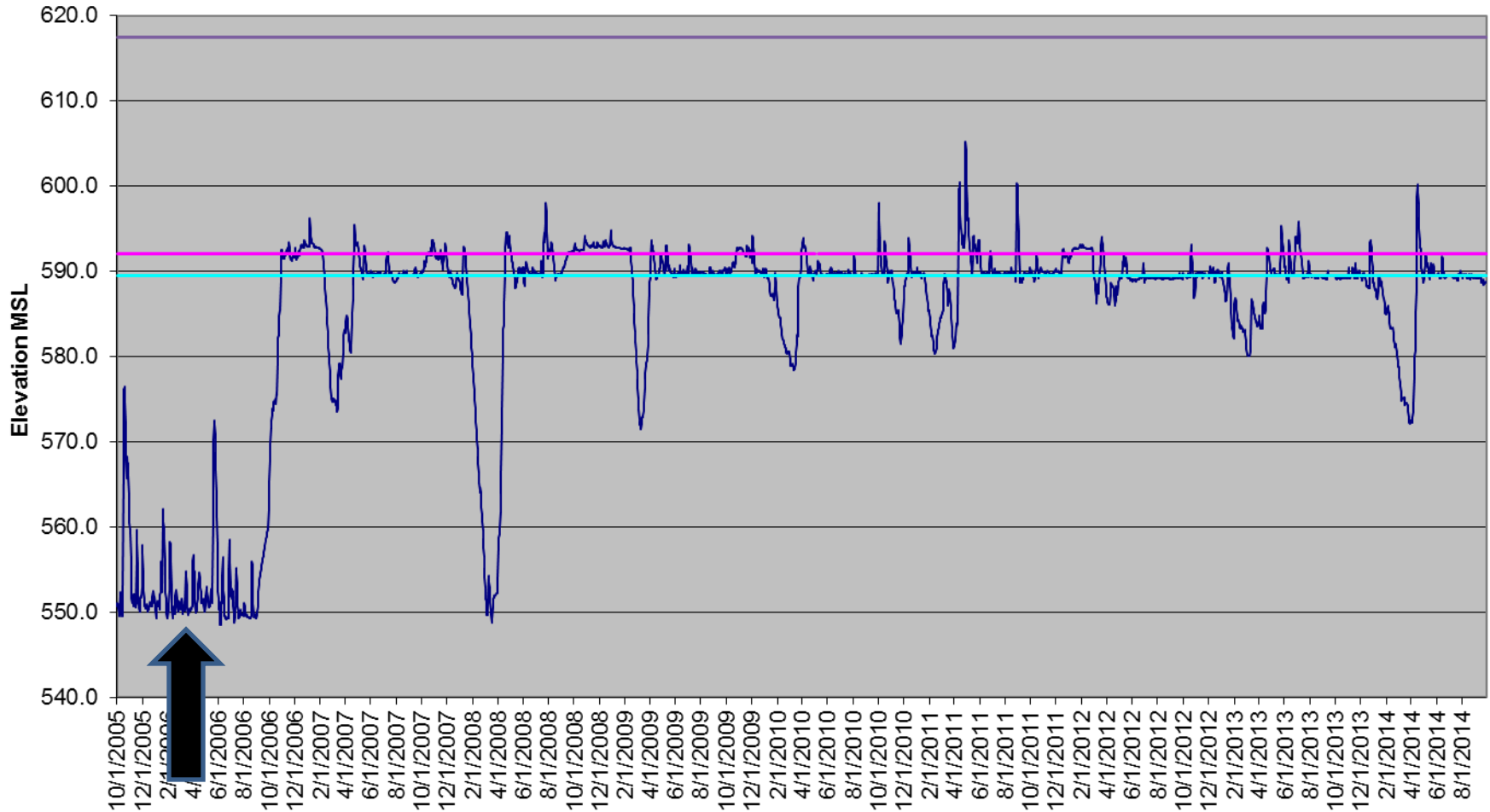
Remote Campsites



Blush Hill Access



Waterbury Reservoir Levels



Date

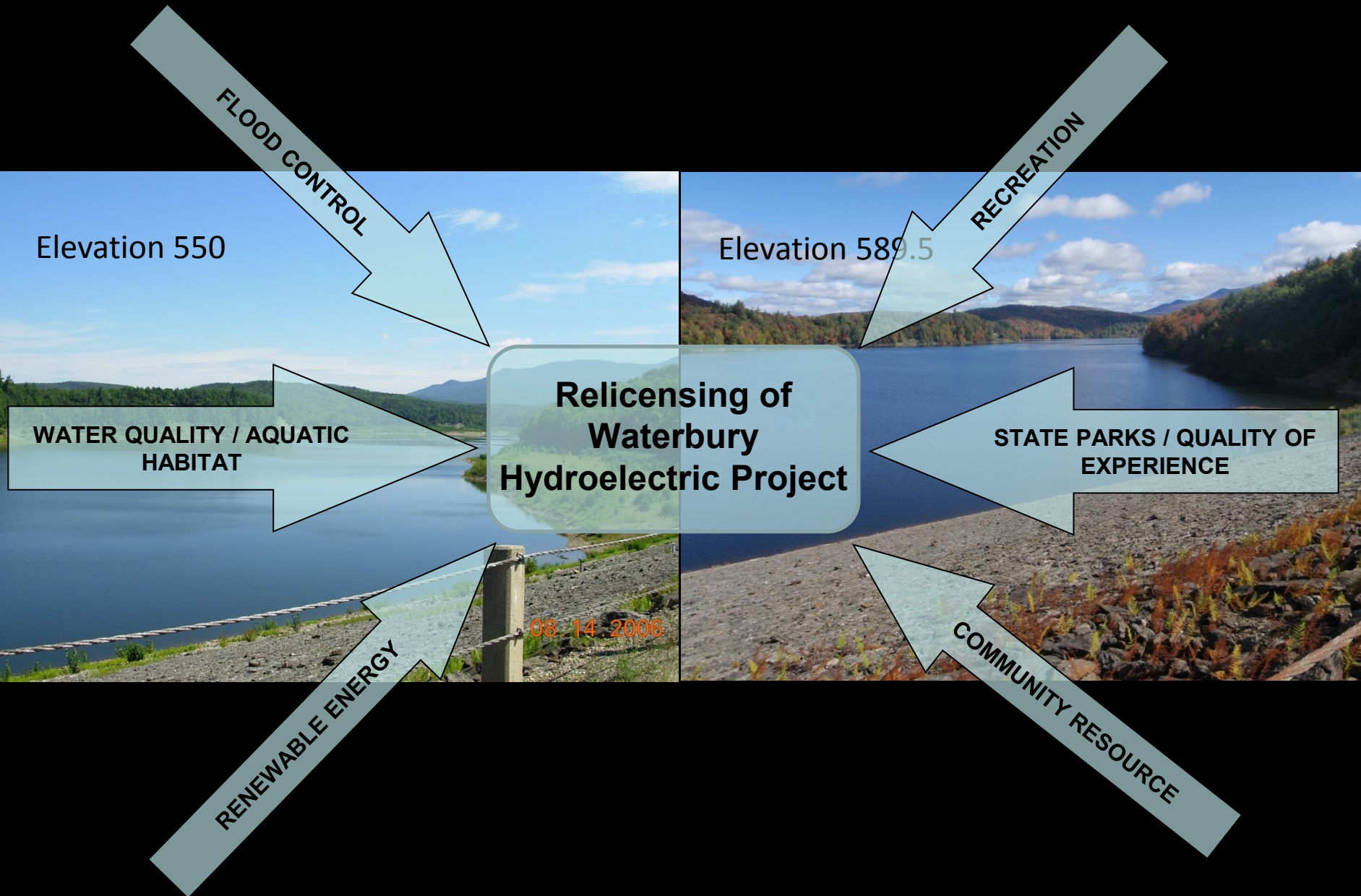
ANR Alternative Proposal

PRO

- Increased water storage year-round
- Decreased hydraulic loading on dam

CON

- Decrease opportunities for swimming, boating, and fishing
- Continue shoreland erosion
- Large increase variation in reservoir levels
- Impacts of fish and wildlife habitat



FLOOD CONTROL

Elevation 550

WATER QUALITY / AQUATIC HABITAT

**Relicensing of
Waterbury
Hydroelectric Project**

RECREATION

Elevation 589.5

STATE PARKS / QUALITY OF EXPERIENCE

COMMUNITY RESOURCE

RENEWABLE ENERGY

08 14 2006

ANR Proposals

Preferred Proposal

- Summer water level will not change
- Annual winter drawdown will be eliminated after gate repair
- Criteria for drawdown will be developed
- Decrease water storage during spring runoff

Alternative Proposal

- Increase water storage year round
- Reduce Hydraulic load on the dam
- Temporary large fluctuations in reservoir level
- Reduction of recreational opportunities

Comments will be accepted till
October 21st

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or

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