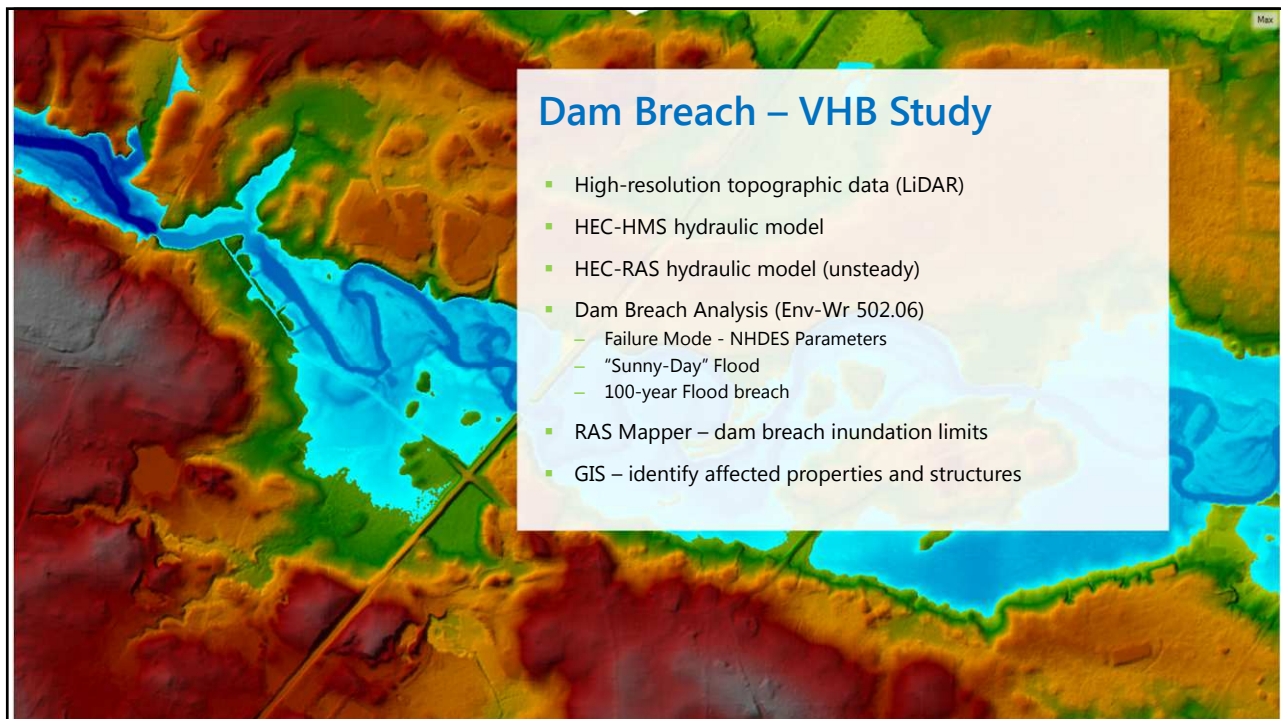
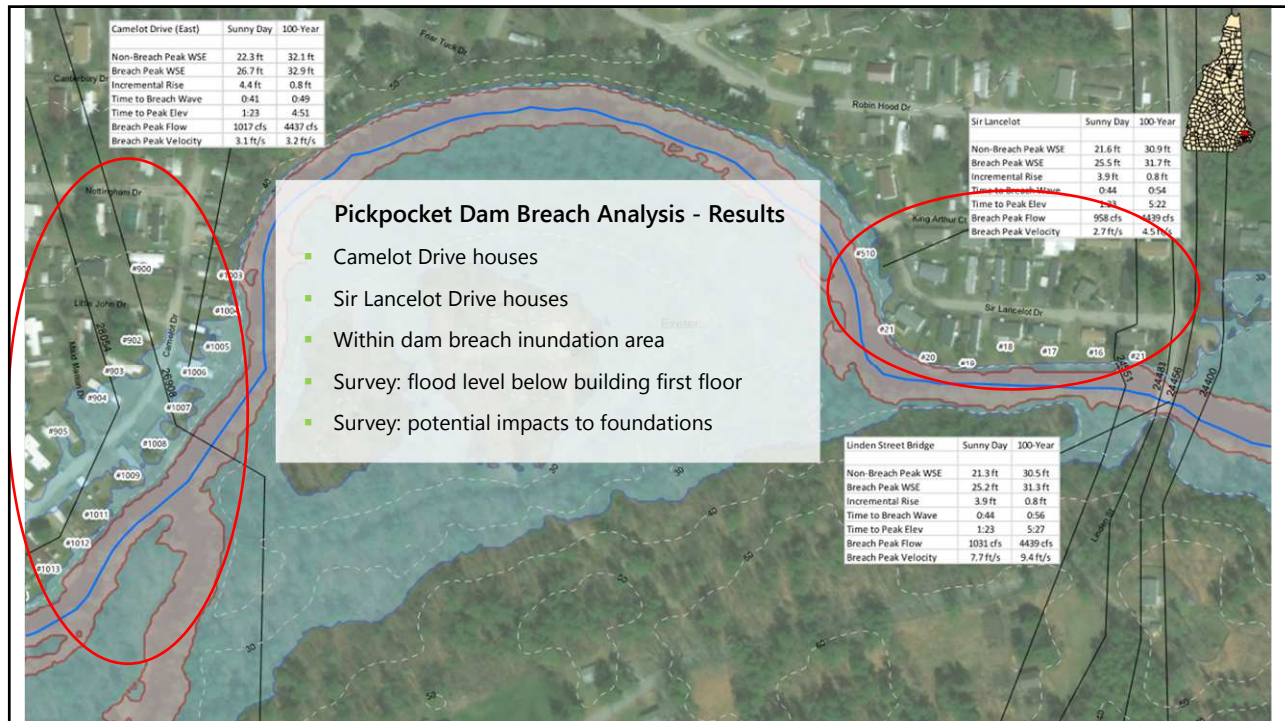
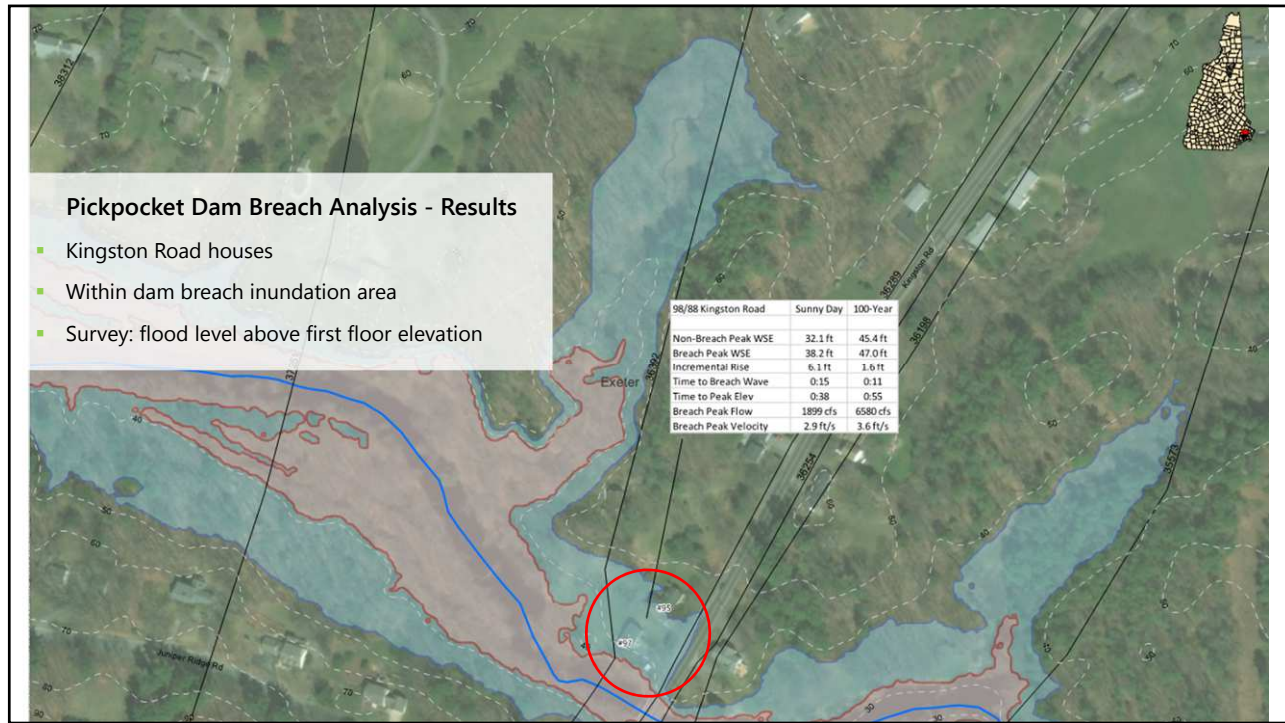




## Project Background

- (March 2011) NHDES issues Letter of Deficiency – breach analysis required
- (December 2016) VHB completes dam breach analysis
- (October 2017) Follow-up building survey by VHB
- (December 2017) Revised Dam breach analysis by VHB
- (January 2018) Dam breach analysis submitted to NHDES Dam Bureau
- (March 2018) Dam Bureau issues determination letter: High-Hazard





## High- vs. Low- Hazard Classification

NHDES Regulatory Requirements (Env-Wr 300, Env-Wr 500)	Low-Hazard Classification	High-Hazard Classification
Annual Dam Registration Fee	\$400	<b>\$1,500</b>
Operation & Maintenance Plan	Required	Required; minor revisions to plan
Safety Inspection Schedule	Every 6 years	<b>Every 2 years</b>
Discharge Capacity	50-year flood	<b>250% of 100-year flood or Inflow Design Flood (IDF)</b>
Emergency Action Plan	Not Required	<b>Required</b>

## Next Steps

- Prepare Emergency Action Plan (EAP)
- Address Env-Wr 303.12 Discharge Capacity Requirement
  - Feasibility Study
  - Public Input
- Decide on action(s) to address dam deficiencies
- Schedule/deadlines: coordinate with NHDES Dam Bureau

## Emergency Action Plan (EAP) - Components

- Breach Analysis (use existing VHB dam breach analysis)
- Inundation mapping (use existing VHB dam breach analysis)
- Coordination/Acknowledgement with local communities (Town of Exeter)
- Notification flow-chart and checklists
- List of official EAP holders, contact info, roles and responsibilities of Town & state personnel
- Preventive actions
- Local evacuation procedure
- Final distribution and public notice

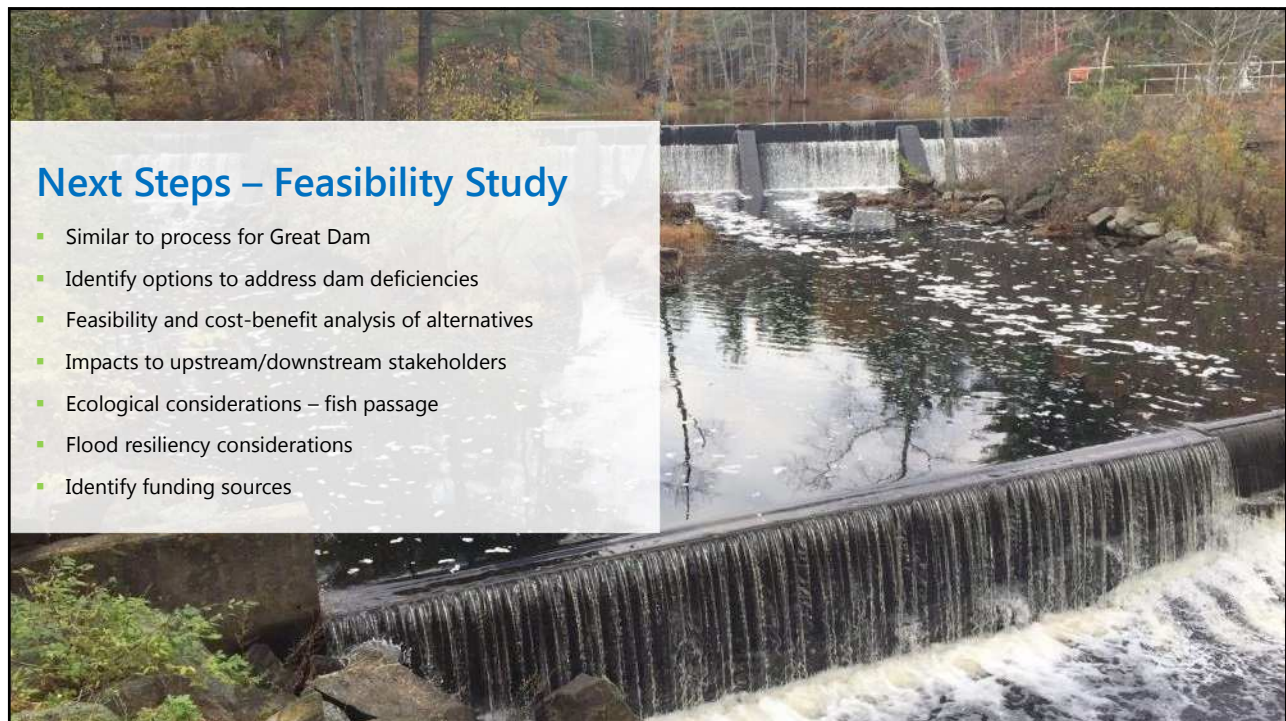
## Discharge Capacity Requirement (Env-Wr 303.12)

- Dam must safely pass: 250% of 100-year flood or Inflow Design Flood (IDF)
  - IDF: site-specific, determined using FEMA P-94 (2013) guidelines
- Based on VHB breach analysis this is unlikely
- 100-year flood overtops dam, with flow over side embankments
- **Dam must be improved/replaced/removed if requirement not met**



## Discharge Requirement – Options Available

- Perform Dam stability analysis (Env-Wr 303.12)
  - Would likely indicate that existing structure is deficient
- Appeal classification
  - Unlikely, as NHDES determination is based on VHB dam breach analysis
- Retrofits or other improvements
- Dam Removal
- Other options?
- Request time extension from NHDES (Env-Wr 303.13)



Jake San Antonio, PE | jsanantonio@vhb.com | 617.607.2710

Dave Cloutier, PE | dcloutier@vhb.com | 207.536.2582



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