Downpours and Drought Managing for Extremes...

> NH Coastal Adaptation Workgroup October 26, 2016

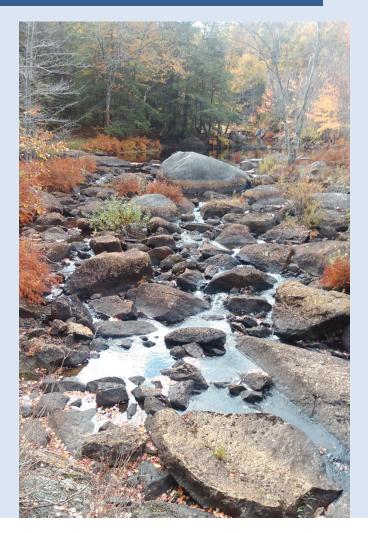
Our Pond Sept 2016

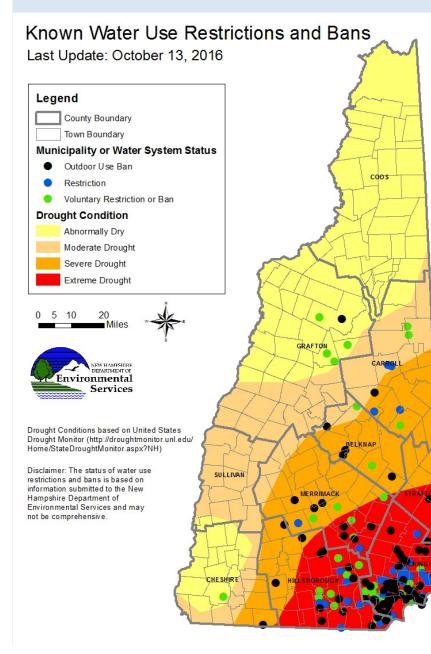
Our Pond April 2007

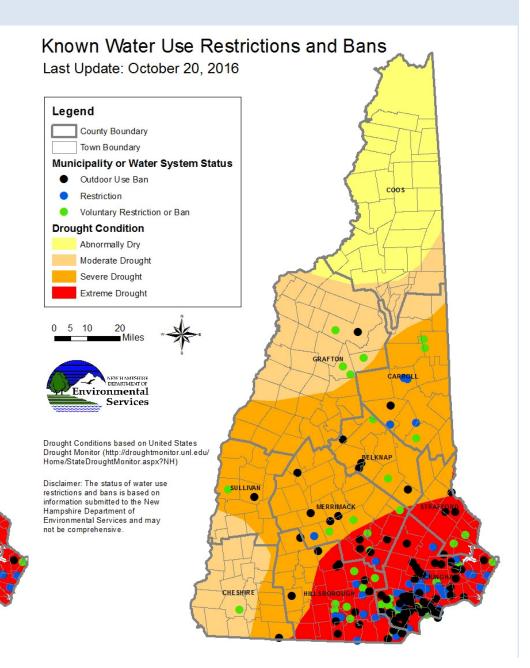


The current drought condition is a very slow-moving natural disaster that may continue to worsen

- Southern New Hampshire is experiencing a drought emergency
- We have received about 50% of our normal rainfall over the last six months
- Stream flow and groundwater levels are at historic low levels







Droughts

- Multi-year events; take some years to develop. This will be felt for longer than one season
- Infiltrated water will wet dry soil particles before reaching the groundwater; ET continues through leaf off
- High intensity rain fall could cause more runoff and flash flooding; less infiltration

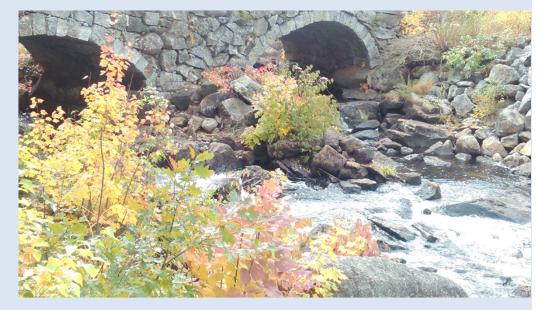


Usual water level

Best Scenario

- Medium intensity of rain over long duration
- Stream flow will increase but not flood; ground water will gradually increase
- Just because we are in a drought doesn't mean we can't get flooding!





Downpours and Drought

- We need to plan for both flooding and drought
- Low Impact Development (LID) is good for both conditions
- Today we will talk about the scales at which these can happen – residential, community, watershed level



Moving Forward

- The power of redevelopment for drought and floods
- What is "redevelopment"?
 - a change in use or expansion of an existing use
 - development of abandoned property
- Redevelopment can slowly add more resilience to the built landscape
 - e.g. aging infrastructure and the need for upgrades
- Regulated by municipal planning boards by Site Plan Review Regulations and NHDES Alteration of Terrain permit

From Academy Award Winners Leonardo DiCaprio and Fisher Stevens

THE SCIENCE IS CLEAR, THE FUTURE IS NOT

BEFORE THE FLOOD

Thursday, November 3rd **UNH Memorial Union Building Theater I** Doors: 6:30 Film: 7:00 Post-Film Panel: 8:30-9:00

NATIONAL GEOGRAPHIC PRESENTS A RATPAC DOCUMENTARY FILMS PRESENTATION OF AN APPLAN WAY PRODUCTION IN ADVISION AND INCLUSION AND DATE AND DATE OF A IN BY GEOFFREY RICHMAN A.C.E. BEN SOZANSKI ABHAY SOFSKY AND BRETT BANKS ESE ADAM BARDACH MARK MONROE AND ZARA DUFFY BY FISHER STEVENS TREVOR DAVIDOSKI JENNIFER DAVISSON BRETT RATNER AND JAMES PACKER Products by LEONARDO DICAPRID DISCIPLING BY FISHER STEVENS NATIONAL INSURGENT RATPAC GEOGRAPHIC Union of University of New Hampshire Concerned Scientists N PREP

Sustainability Institute

November 3, 2016 **UNH MUB** 6:30 pm King Tide **Photos** 7:00 pm film 8:30 discussion

