



Connecticut Department of Energy and Environmental Protection



South Branch Park River Flood
Control System Maintenance
Public Information Meeting
Newington

November 5, 2015



Connecticut Department of Energy and Environmental Protection

Agenda

- Who we are
- History of this maintenance project
- Present Status
- Next Steps
- Break – discussion by neighborhoods
- Questions and answers



What We Do



Connecticut Department of Energy & Environmental Protection



Connecticut's Dam Safety Program

Who are we?

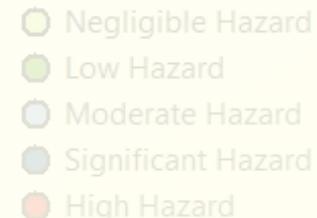
Two programmatic areas:

- Statewide dam safety regulatory program (IWRD)

 - 3086 regulated dams

- Oversight of state-owned dams (IWRD and Support Services Division)

 - 265 state-owned dams



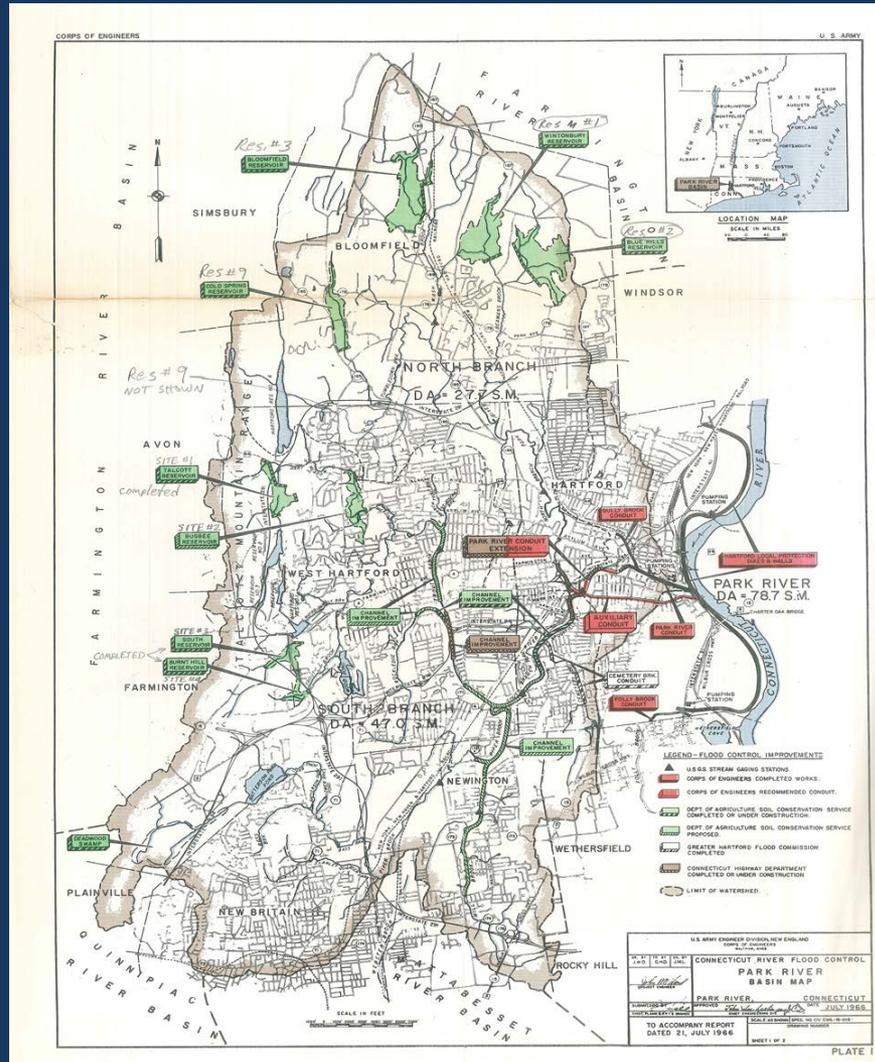
What does that mean?

State-Owned Dam Oversight

- CTDEEP is responsible for operation and maintenance of 239 of these dams, which includes 28 flood control dams/dikes protecting towns such as Bloomfield, Hamden, Hartford, Stafford, Torrington, and Waterbury
- DEEP is responsible for day-to-day operations and maintenance, as well as overseeing repairs, upgrades & construction contracts.



Park River Basin Flood Control



Where Can You Find Information

- Website info: www.ct.gov/deep/sbpr
- New additions
 - Copy of contract
 - Copy of updated plans
 - Environmental protection plan
- Where we will post regular job meeting minutes and additional information



South Branch of the Park River (SBPR)

- 1961 - Agreement between the SCS, the State and the municipalities (West Hartford, Newington and Hartford) in response to the Flood of '55
- 1964 - Agreement with Hartford to make channel improvements
- 1972 - Agreement with West Hartford to include channel improvements
- 1986 - Agreement with Newington to make channel improvements to Piper Brook
- Towns to incur costs to maintain vegetation and the state to incur costs to make future capital improvements
- Last major maintenance project occurred in 1999-2000



Why this scale of maintenance work now?



Natural Resource Conservation Services (NRCS)

- Annual inspections of the SBPR flood control project are required by NRCS. Federal, State and Town staff attend inspections and town is provided with inspection reports
 - Annual reports include increasing level of notification that maintenance deficiencies existed and were not being adequately addressed
 - 2010 NRCS notifies CTDEP of Operation and Maintenance violations within SBPR flood control channels and requests necessary maintenance within 2 years to avert further action
 - CTDEEP worked with NRCS to obtain a complete field and office analysis of required work and estimated costs
 - CTDEEP was granted an extension to obtain necessary funding through the state Bond Commission but warned of impending decertification if the necessary repairs and maintenance are not completed



2010 Notice of Violations

United States Department of Agriculture



Natural Resources Conservation Service
344 Merrow Road, Suite A
Tolland, CT 06084-3917
(860) 871-4011

November 29, 2010

Ms. Denise Ruzicka
Director
DEP – Inland Water Resources Division
79 Elm Street
Hartford, CT 06106-5127

RE: OPERATION AND MAINTENANCE OF THE SOUTH BRANCH PARK RIVER
WATERSHED FLOOD CONTROL CHANNELS

Dear Ms. Ruzicka:

This letter is to inform you of Operation and Maintenance (O&M) violations in the South Branch Park River (SBPR) watershed flood control channels.

In October 1985, the Connecticut Department of Environmental Protection (DEP) signed an O&M Agreement with the Natural Resources Conservation Service (NRCS) – known then as the Soil Conservation Service (SCS) – as sponsor of the SBPR flood control measures. The agreement states the sponsor is “responsible for operating and performing or having performed all needed maintenance” of the dams and channels identified in the Watershed Protection Flood Prevention Work Plan for the South Branch of the Park River Watershed, Hartford County, Connecticut. Attached to the agreement is an O&M Plan which outlines specific requirements to be performed by the sponsor.

The dams in this watershed are typically well maintained. Some channel sections are well maintained while others are in violation of the O&M Plan and in need of maintenance. The banks of several sections of flood control channels in the watershed contain unsuitable woody and other vegetation. In one section, the woody vegetation has been cut but not removed, a potential hazard should it float downstream and cause an obstruction. Channel sections identified to have issues are shown on the enclosed map; lengths of each section are shown on the enclosed table.

This unsuitable vegetation is a problem because design n-values (roughness) of the channels are 0.03 (in most sections) to 0.04, while the current woody and/or other high, dense vegetation on the channel banks have an estimated n-value of 0.09 to 0.11. Therefore, the channel does not have the conveyance capacity for which it was originally designed, causing flood elevations upstream to increase.



Connecticut

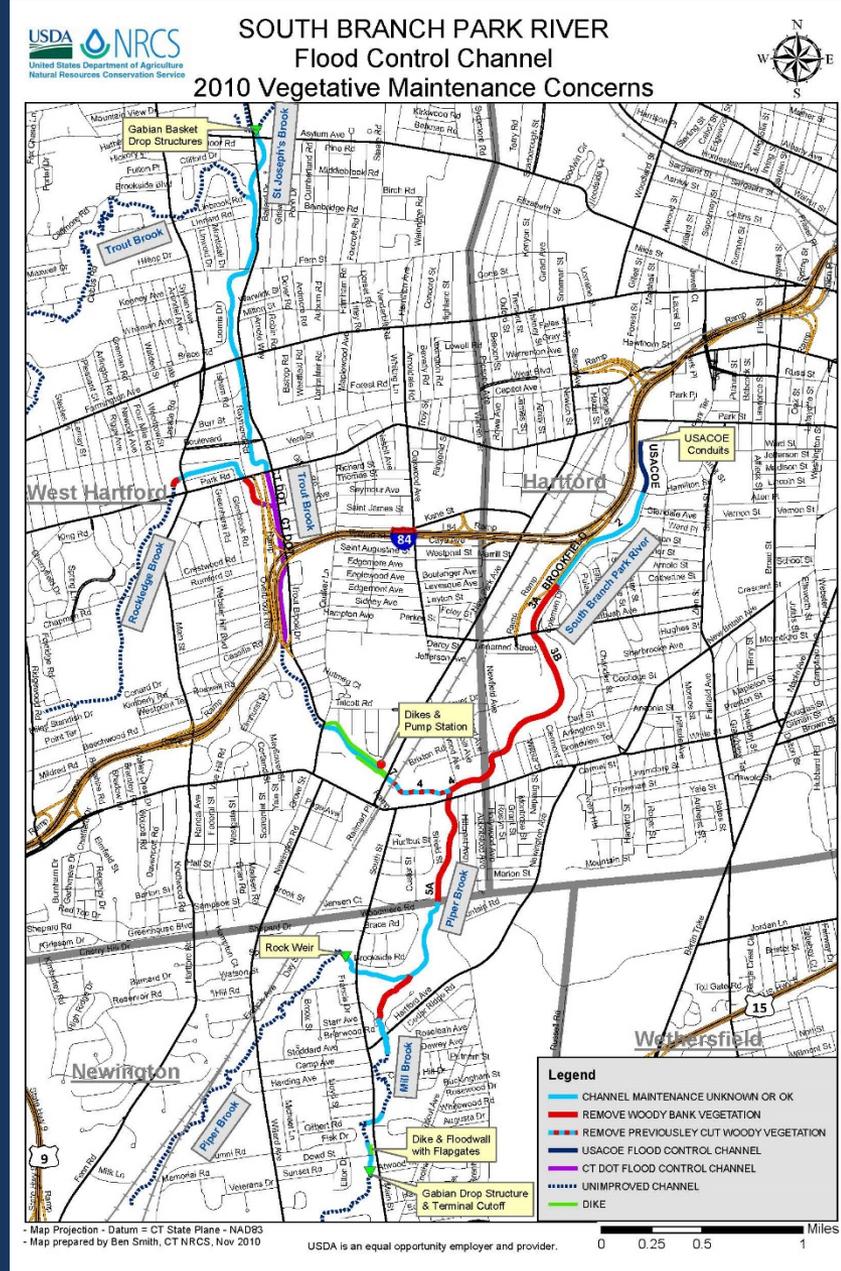
Helping People Help the Land
An Equal Opportunity Provider and Employer

rotection

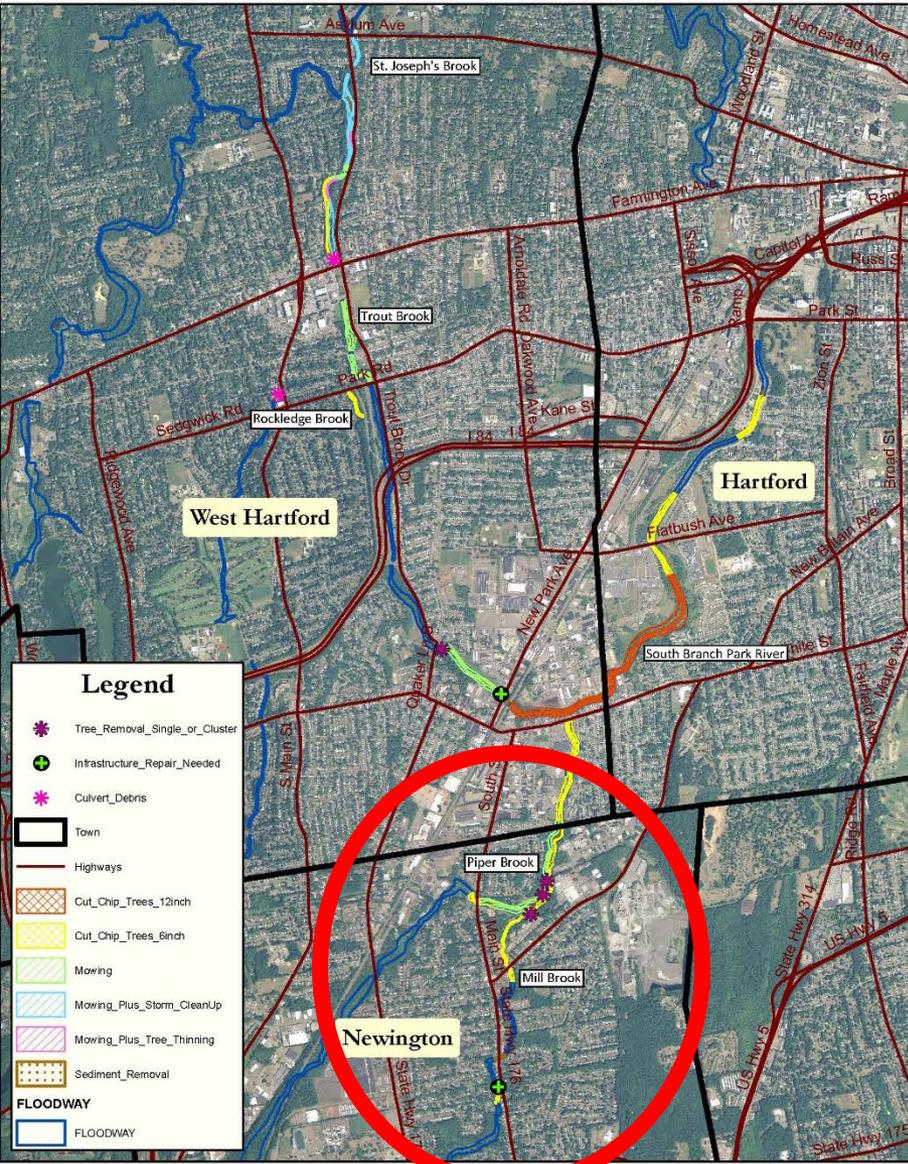
NRCS Overview Map from 2010 Inspection

South Branch Park River Overview

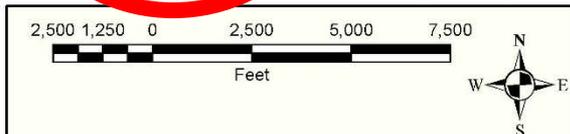
- Includes maintenance in Hartford, West Hartford and Newington – all three towns received copies of this as well as previous and subsequent annual inspection reports
- Work includes:
 - Tree and vegetation removal
 - Sediment removal
 - Structural repair to floodwalls and flap gate structures.



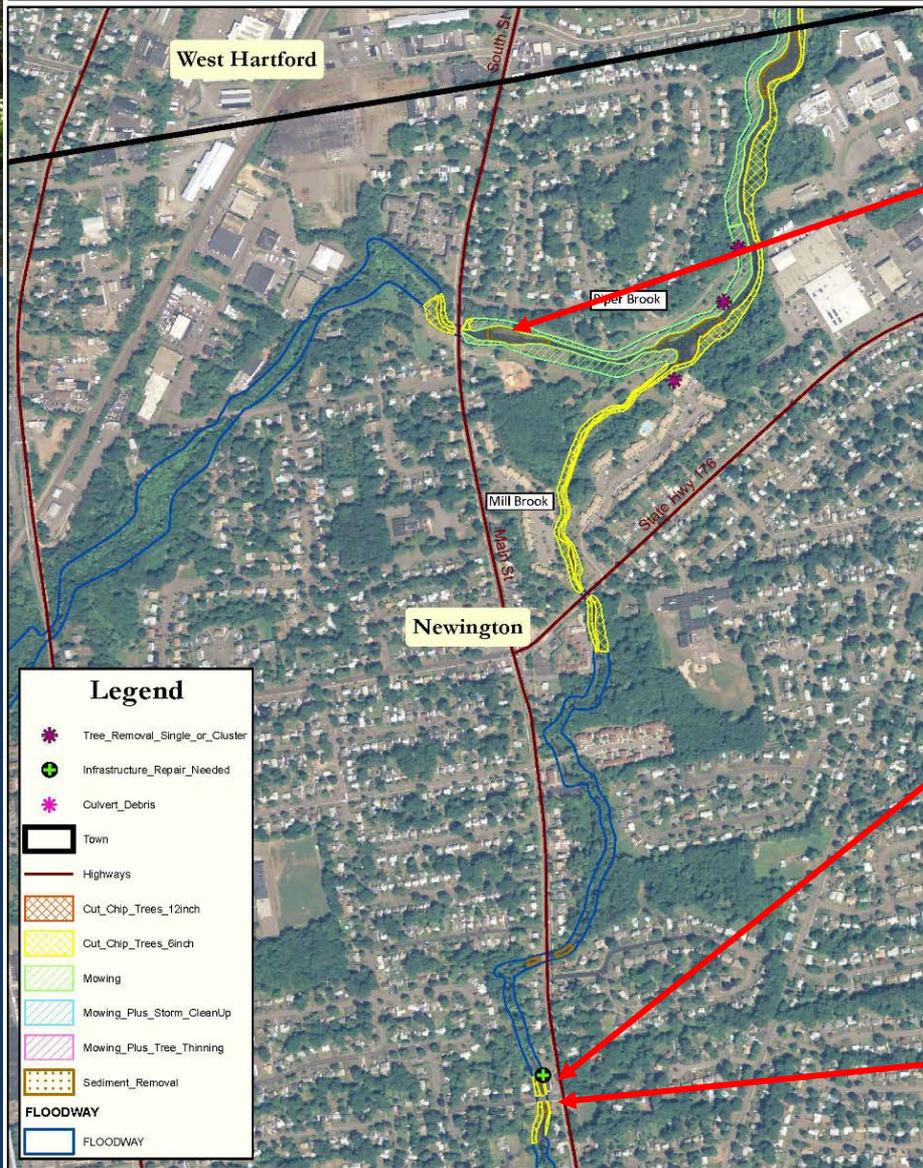
Channel Maintenance Areas Hartford, Newington, West Hartford



Newington Local Channel Maintenance Area from NRCS 2010 Inspection Report



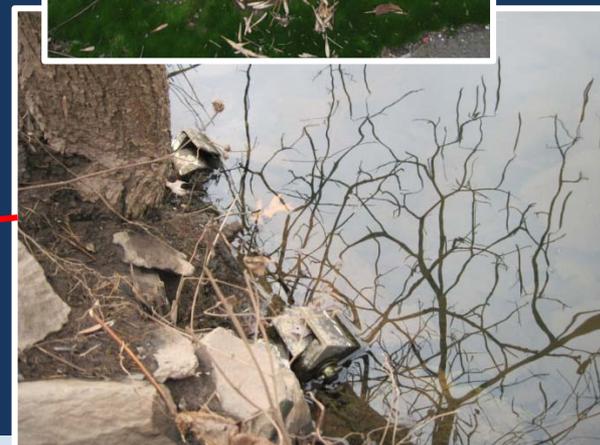
Channel Maintenance Areas Newington



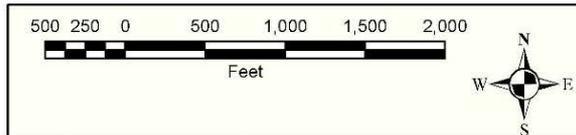
Remove sediment from Pond 5 in Newington



Repair damage to flood wall in Newington



Repair existing flap gates on Mill Brook in Newington



What if maintenance isn't done?



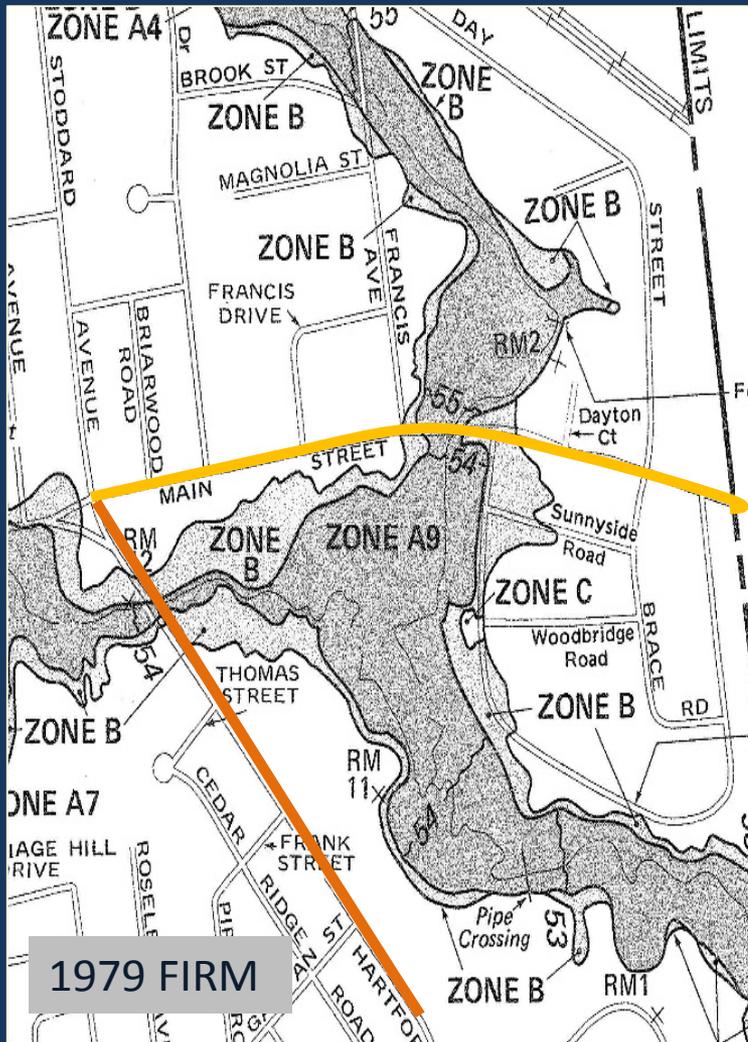
Connecticut Department of Energy and Environmental Protection

For the State of CT

- Loss of future rehabilitation funding for all structures in the Park River Basin Watershed
- Loss of future watershed planning funding and rehabilitation funding for future projects and all 28 flood control projects in the state



Flood Insurance Rate Maps



Project Development Timeline





- **April 27, 2012**
State Bond Commission funding for design and permitting of necessary repairs and maintenance
- **July 25, 2014**
State Bond Commission funding of \$4.5M for construction

- **October 23, 2014**
Notice of Tentative Determination to Issue a Dam Safety Permit published
- **December 19, 2014**
Dam Safety Permit Issued

- **June 11, 2015**
Bid advertisement

- **June 25, 2015**
Mandatory Pre-bid Meeting
- **July 30, 2015**
Bid opening.
Paganelli Construction corporation selected

- **September 16, 2015**
Letter to local abutting residents and businesses regarding project status.

- **October 1, 2015**
Preconstruction meeting with contractor, CTDEEP and towns



Coordination Meetings

- 11/19/13 – Meeting with Town of West Hartford to review draft plans
- 06/25/14 – Meeting with Hartford, Newington and West Hartford to discuss semi-final plans
- 11/17/14 - Meeting with town of Newington to discuss project and O&M agreements
- 06/25/15 - Pre-bid meeting
- 07/17/15 – Meeting with West Hartford to discuss project access points
- 10/01/15 – Pre-construction meeting in CTDEEP offices, Hartford, West Hartford and Newington town officials in attendance
- Field Meetings:
 - 10/19/15 Weekly job meeting
 - 10/26/15 Weekly job meeting



What happens moving forward?



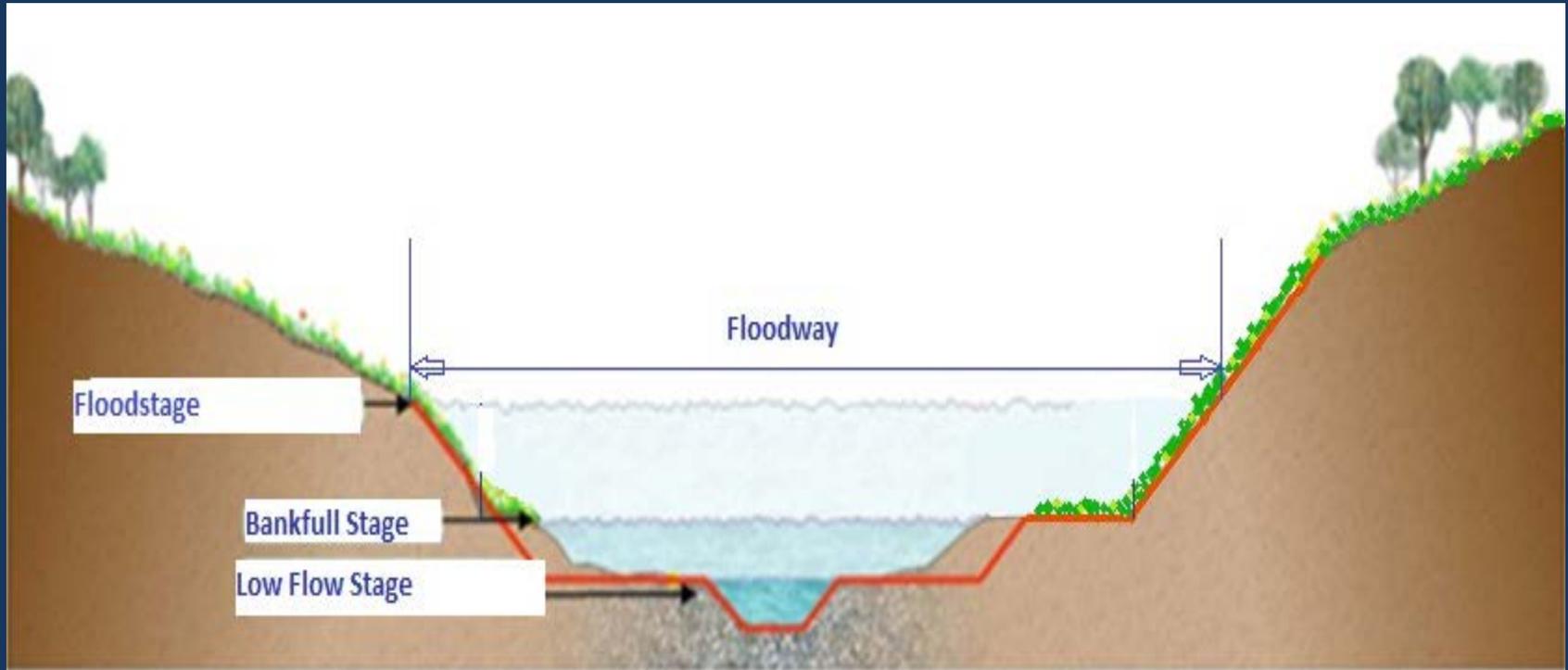
Connecticut Department of Energy and Environmental Protection

Work to be completed

- Dredging and sediment dewatering
- Trees and vegetation removed from flood channel
- Concrete flood walls repaired
- West Hartford and Hartford similar work
- Access site restoration



Keeping the floodway clear



Sediment Quality

- Potential Contaminants
 - Sampling performed previously at locations considered by Department as having potential for some level of contamination
 - There is no hazardous material being dredged as part of this project
 - Materials identified as regulated will be segregated and disposed of by the contractor in compliance with all appropriate laws and regulations
 - Due to concerns raised by residents additional sampling has been performed in two areas



Sediment Schedule

- Dredging originally scheduled to be complete by December 1st
- Dewatering to take approximately 1 month
- Hauling and disposal to take about 3 weeks



Sediment Management

- Access/safety/oversight
 - Full time inspector
 - Will inspect stockpile areas, trucks and routes, quantities and sampling results
 - Hauling to occur during winter months to minimize any exposure to noise or odors
 - Agreed that trucking will occur between 9 am and 3 pm



Environmental Protection Plan

- An Environmental Protection Plan (EPP) has been submitted and covers:
 - Soil handling (including all access, staging and stockpile locations)
 - Traffic control including temporary signage
 - Street sweeping
 - Erosion and Sedimentation Controls
- EPP is posted on our website



Tree/Vegetation Removal

- Updates to removal plan
 - Trees being marked
 - Trees must be removed within the floodway
 - We will work to minimize tree removal outside of the floodway
- Herbicide application
 - Only EPA approved herbicides have been used, by a licensed applicator, following approved procedures, including posting signage
 - Additional spraying to occur following remainder of tree and vegetation removal to inhibit spread of invasive plants and growth within flood channel
- Licensed arborist
 - A licensed arborist is on call according to the terms of the contract and is available at any time the DEEP or resident inspector deems necessary



Tree Clearing

- No trees are being cleared without approval of CTDEEP
- Trees removed in areas designated as Type II vegetation are at the direction and approval of CTDEEP
- The contractor is not making additional money by clearing additional trees



Flood wall repair issues/ schedule

- Saw-cutting and Demolition of New Park Avenue flood walls moved from December 2015 to March 2016. Reconstruction to follow in April 2016.
- Concrete demo and joint seal replacement of Dowd Street flood wall to occur concurrently with Dowd Street Bridge flap gate cleaning and repair in April 2016.



What will it look like?



Connecticut Department of Energy and Environmental Protection

Tree removal



What will we do to restore sites?



Connecticut Department of Energy and Environmental Protection

Within and directly adjacent to channel

- No trees or woody vegetation is allowed within the flood way. We cannot replant in these areas
 - We cannot maintain a treed buffer all along the floodway due to limited property constraints
- Sediment will be removed once it is dry enough to be hauled



Access and staging areas

- CTDEEP will restore sites to the previously existing conditions as much as possible including:
 - Remove anti-tracking pads
 - Topsoil
 - Seed



Where Can You Find Information

- Website info: www.ct.gov/deep/sbpr
- New additions
 - Copy of contract
 - Copy of updated plans
 - Environmental Protection Plan
- Where we will post regular job meeting minutes and additional information





- CTDEEP Contacts:
 - Dan Biron
 - Jennifer Perry
 - Cheryl Chase
 - Betsey Wingfield
- Website info: www.ct.gov/deep/sbpr



Neighborhoods

- Neighborhood 1 – Brookside Ave/Main Street
- Neighborhood 2 – Hartford Ave/Main Street

