

#### What are wetland benefits?



- Flood and storm control
- Wildlife habitat
- Groundwater protection & recharge
- Recreation
- Pollution treatment
- Erosion control
- Education and research
- Open space and aesthetic value
- Nutrients for freshwater food cycles
- Fish nursery grounds and sanctuary

#### What is wetland mitigation?

- Wetlands are protected by federal and state laws
- Proposed impacts to wetlands must be avoided, then minimized
- Unavoidable impacts must be mitigated, or compensated for
- Accomplished by wetland creation, restoration, enhancement, and preservation
- Goal is no net loss of wetland functions and values (benefits)
- Mitigation plan developed through federal and state permitting processes





# Federal definition of wetland mitigation bank A wetland, stream, or other aquatic resource that has been

restored, established, or (in certain circumstances) preserved for the purpose of providing compensation for unavoidable impacts to aquatic resources permitted under Section 404 or a similar state or local wetland regulation. A mitigation bank may be created when a government agency, nonprofit organization, or other entity undertakes these activities under a formal agreement with a regulatory agency.



Bank Bank site instrument Interagency Service review area team



#### Bank site



 Physical acreage restored, established, enhanced, or preserved



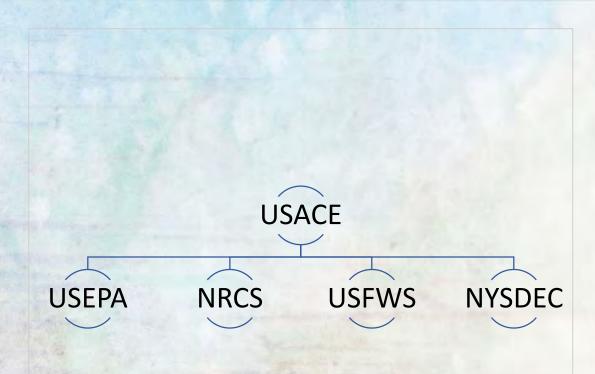
#### Bank instrument

legal agreement between bank owners and regulators

- Bank name, location, sponsor
- Bank objectives
- Site selection factors
- Proposed service area
- Sponsor's legal responsibility
- Site conditions
- Mitigation work plan
- # and type of credits
- Site protection instrument
- Financial assurances

- Performance standards
- Monitoring and reporting plan
- Credit release criteria
- Accounting procedures
- Maintenance plan
- Adaptive management plan
- Long-term management plan
- Default provisions
- Bank closure plan
- And more!

#### Interagency Review Team



- Team that provides regulatory review, approval, and oversight of bank
- Chaired by US Army Corps of Engineers
- Other members include US

   Environmental Protection Agency,
   Natural Resources Conservation
   Service, US Fish and Wildlife
   Service, and NYS Department of
   Environmental Conservation

#### Service Area



- The geographic area in which permitted impacts can be compensated for at a given bank (watershed approach)
- Proposed service area for CNYMB is Oswego River/Finger Lakes Watershed
- Analysis of USACE-issued permits in proposed service area 2010-2013 identified estimated need for 5 acres/year of compensatory wetland mitigation





#### Here's how it works

### Instead of multiple small mitigation projects ("permittee-responsible")...

Applicant	Impacted Wetlands	Mitigation Required	Mitigation Plan
А	0.5 acres	1.5 acres	Onsite
В	0.6 acres	1.2 acres	Offsite
С	1.2 acres	2.8 acres	Onsite

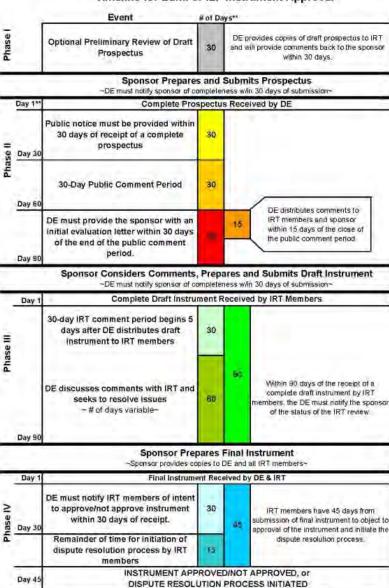
### Mitigation banking creates fewer, larger mitigation projects

Applicant	Impacted Wetlands	Mitigation Required	Mitigation Plan
Α	0.5 acres	1.5 acres	CNY Bank
В	0.6 acres	1.2 acres	CNY Bank
С	1.2 acres	2.8 acres	CNY Bank

## Process and timing for approval to develop a bank

This proposal is currently in Phase I of the process required to receive approval to create a wetland mitigation bank. The bank instrument will identify the timeframe for establishing and operating the bank, if approved. A 10-year timeframe can be estimated to construct the bank, meet performance standards, and sell the credits. The site will then be managed in perpetuity to protect the resource.

#### Compensatory Mitigation Rule Timeline for Bank or ILF Instrument Approval\*



EPA/Corps draft 4/02/08

\*Timeline also applies to amendments

Total Required Federal Review (Phases II-IV): ≤225 Days

<sup>&</sup>quot;The timeline in this column uses the maximum number of days allowed for each phase.

# Examples of existing banks









#### Advantages of mitigation banking

as compared to traditional permittee-responsible mitigation

- Greater certainty about outcomes
- Extensive financial, planning, and scientific resources
- Reduced permit processing times
- More cost-effective mitigation
- Efficient use of agency resources in review and compliance monitoring





#### Disadvantages of mitigation banking



- Pay to Pollute?
- Social Justice?
- Bankers skip town?
- Loss of wetlands?
- Other concerns?

#### Examples of on the ground results

2005 2009









#### **Ecological Restoration:** Before, During, After



#### After





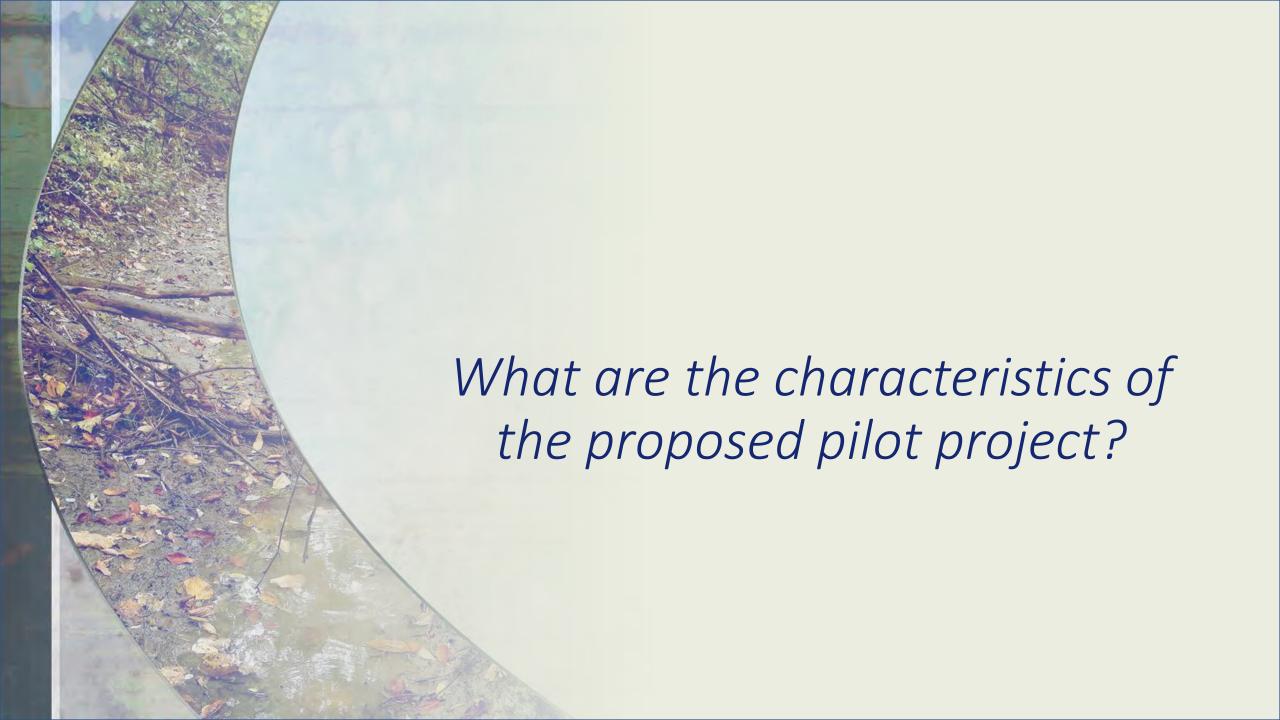






# Economic development is linked to environmental stewardship

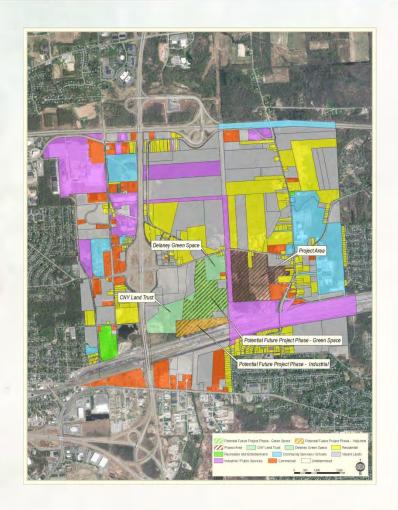
- Demand analysis indicated an estimated 5 acres/year of compensatory mitigation needs in watershed service area
- Local development plans and proposals also suggest potential need for wetland mitigation
- DeWitt Industrial Development corridor requires offsets for actual economic development – see map
- Proposed site lends itself to ecological restoration
  - Degraded wetland ecosystem





#### Site & Setting Description

- 90-acre site
- Bordered by:
  - Kirkville Road
  - Residential/commercial lots along Fremont Road
  - CSX rail yard
  - Girden Road/utility easement
- 66-acre site west of Girden Road holds Butternut Creek stream corridor

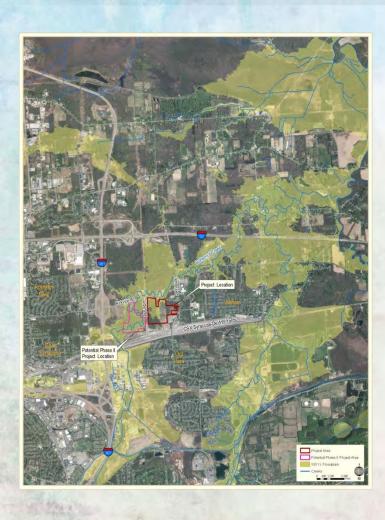


#### Most of existing site currently wetlands



- Wetland delineation completed by AES in 2015 & 2016
- 64.6 acres of wetlands mapped
- Two portions of a large NYSDEC regulated wetland onsite
- Central agricultural area has emergent wetlands
- Natural and man-made drainages throughout site

#### Site Characteristics



- In Butternut Creek floodplain
- Potential habitat for federally protected bat species
  - Endangered Indiana bat maternity roost site within 225 yards of site
  - Threatened northern long-eared bat winter hibernaculum located within 5 miles
- Four state-protected native plant species onsite
  - Black Alder, Turtle-heads,
     Cinnamon fern, Royal fern





#### Examples of wetland degradation and restoration







#### Examples of wetland degradation and restoration





#### Examples of wetland degradation and restoration



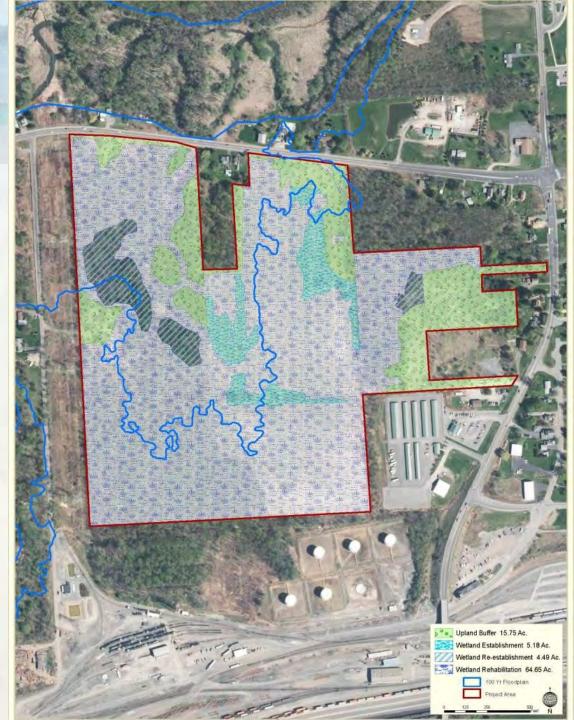






Most of the area in the proposed mitigation bank site is in wetlands.

Opportunities for wetland rehabilitation – or improving wetland functions – exist throughout the site. In some areas, opportunities to create new wetland areas or re-establish wetlands that have been drained or filled also exist. Upland buffers can also be created or enhanced.





#### Restoration Opportunities

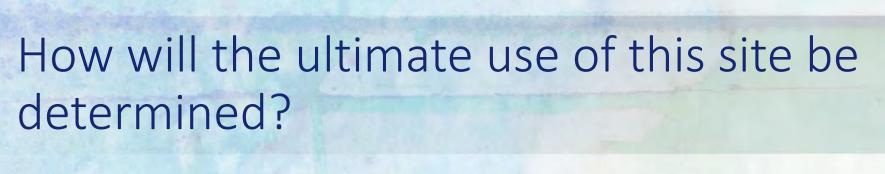
Drainage ditches have been used at the proposed mitigation bank site to drain the wetlands. Plugging ditches would allow for restoration of hydrology.











- This proposal is for use of the site as a wetlands mitigation bank
- Formal process for approval of a wetlands mitigation bank has begun
- Any other type of development proposal for the site would require separate federal, state, local approvals/permits
  - Clean Water Act Section 404, National Environmental Policy Act, New York State Freshwater Wetlands Act, New York State Environmental Quality Act, other
- There are no other active proposals at this time







- Formal process to gain approval for a wetlands mitigation bank has begun
- Please provide comments to be considered
  - Comment cards available tonight
- An additional 30-day comment period will be provided this spring
  - Advertised via public notice
- Please check box on sign-in sheet if you want to be on public notice mailing list

PUBLIC INPUT MEE	TING COM	MENITO
	HIN NO MANAGEMENT	
PLEASE USE THE SPACE BELOW TO TELL US YOUR COMMENTS REGARDING THE CENTRAL NEW Y	ORK MITIGATION BANK	
NAME (PRINT)		
ADDRESS (PRINT)		
Please leave your comments with the meeting conductors, email or mail your comments to:		
Daniel Spethmann, Ph.D. Managing Partner	db	111
Working Lands Investment Partners, LLC 360 Erie Blvd, East, Syracuse, New York 13202		MODRING
	Central New York Regional Planning & Development Board	INVESTMENT PARTNERS.

