

Coon Creek / West Fork Kickapoo Watershed Update

When: January 30, 2020

Where: Coon Valley Legion @ 3:00 pm
Or
Cashton Community Hall @ 7:00 pm

Agenda:

- ♦ Introductions
- ♦ Updates (Vernon, La Crosse, Monroe Counties/DNR/UW-Madison)
- ♦ Status of PL566 structures breached and or damaged from 2018 storm event.
— Monroe County LCD – Director (Bob Micheel)
- ♦ Investigation (Dam Failure) Report – WI NRCS State Engineer (Steve Becker)
- ♦ Coon Creek Watershed Study—(S. Becker)
- ♦ Q & A

Question about the upcoming event contact:

Monroe County Land Conservation Dept. 608-269-8973 or Vernon County Land Conservation Dept. 608-837-5480



- Introductions -

Monroe County - Update

- Design Considerations for Dams & Stream Projects
- Develop Watershed Authority/Joint Powers Board
- Climate Change Task Force

MONROE COUNTY – PL566 DAM REPAIR & CLEANUP

Bob Micheel – Monroe County LCD - Director
January 28, 2020 – SW Area Tech Update

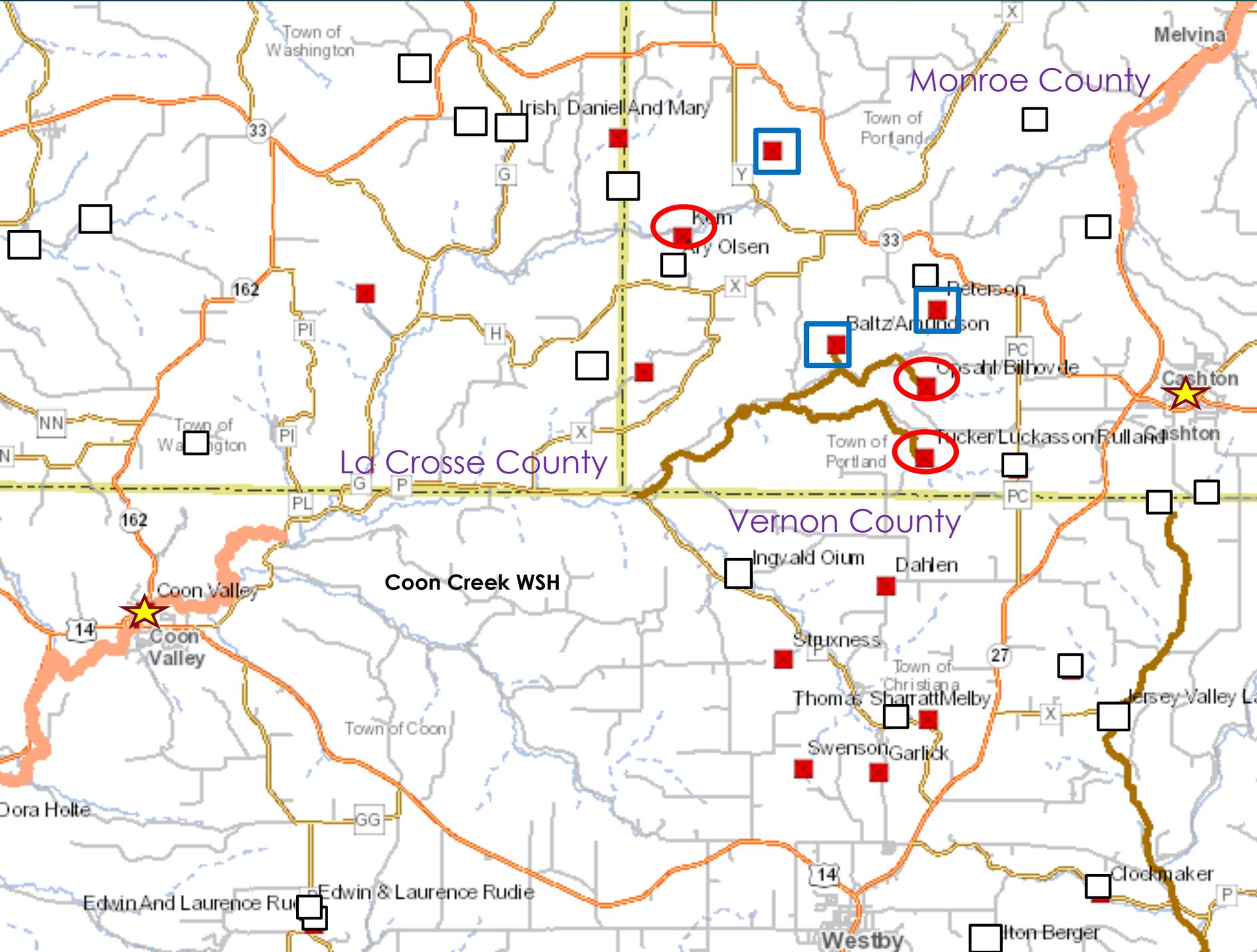
August 28, 2018 – Flood Event



Town of Portland (Coon Creek)



Jersey Valley – Dam Breach – (Kickapoo)



Coon Creek Watershed

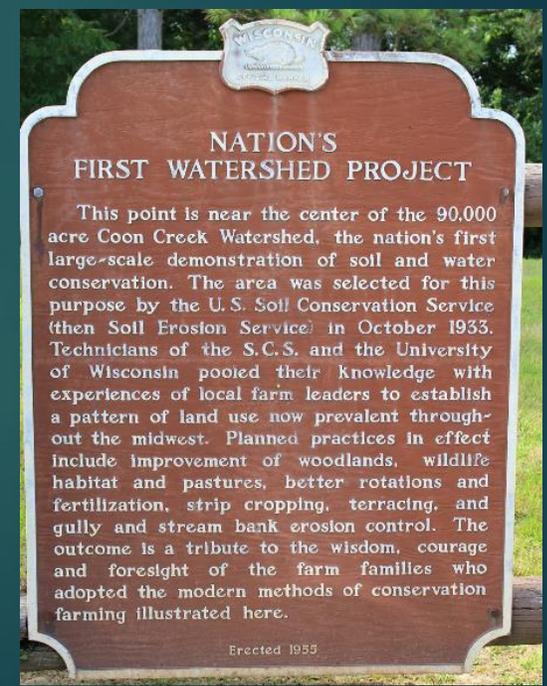
92,589 Acres

Coon Valley – 49,400 acres

14 - PL566 Dams = 25% D.A.

3 Damaged

3 Structures Breached



“National Attention”

CC21 – LUCKASSON DAM

Year Built: 1962-63

D.A. 2,022 acres

Dam ht. 40 ft.

Storage 271 ac. ft.

Combined spillway capacity 655 c.f.s.





August 28, 2018 – 9am



Head Cut



Vertical Bank





Stable
Bank

Pool Area – CC21
April 2019



Pond Drain

Head Cut – 2 channels



Pool Area – CC21
Dec. 2019

Plunge pool

Head Cut – 1 Channel

Pond Drain

Channel Debris Removal



End Point



Flow

Debris Piles

CC23 – Blihovde Dam

Year Built: 1960-61

D.A. 909 acres

Dam ht. 36.5 ft.

Storage 96 ac. ft.

Combined spillway capacity 623 c.f.s.

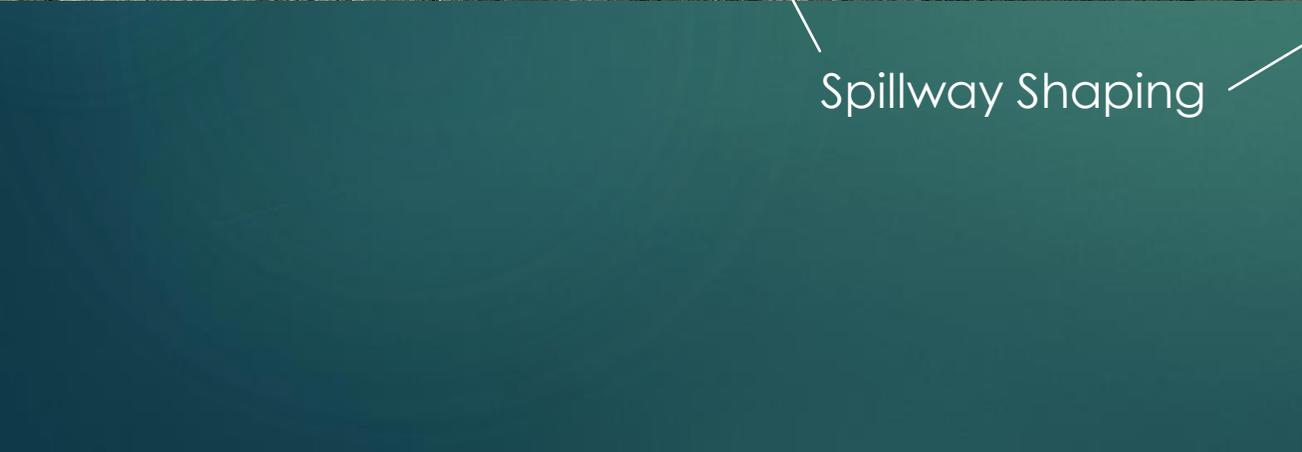




Hydraulic Shadow

CC23 - Left Abutment Failure







Stabilization – Head Cut & Double Bench

Seeding & Mulching



Channel – Debris Removal & Shaping





Oakdale Ave. Bridge

Channel Debris Removal





Dam Construction in the 1950-1960's!



CC29 – Korn Dam
Year Built: 1960-61
D.A. 1,843 acres
Dam ht. 39 ft.
Storage 175 ac. ft.
Combined spillway
capacity 635 c.f.s

New Channel

Coon Creek

Left Abutment Breach



Reconnect - Coon Creek



Before



Construction

Coon Creek



Spring

Main Channel



Head Cut

Control



CC31 – Mashak Dam

Year Built: 1960-61

D.A. 371 acres

Dam ht. 34.5 ft.

Storage 46 ac. ft.



Repair





Groin Shaping

- Waterway Bottom
- Sloped towards the dam
- Tree Removal

Spillway Outlet



CC25 – Baltz/Amundson Dam

Year Built: 1960-61

D.A. 902 acres

Dam ht. 35 ft.

Storage 78.2 ac. ft.

Combined spillway capacity 840 c.f.s

Groin





Auxiliary Spillway Repair



Lined Waterway to stable outlet

Groin Shaping

- Waterway Bottom
- Sloped towards the dam
- Tree Removal



CC24 – Peterson Dam

Year Built: 1962-63

D.A. 563 acres

Dam ht. 33 ft.

Storage 68 ac. ft.

Combined spillway capacity 394 c.f.s.





CC24 – Peterson Dam



Auxiliary Spillway



Right Abutment Repair

Extend – Auxiliary Spillway



Address - Seepage

Borrow Site





Site Stabilized



Opposite - Groin Repair

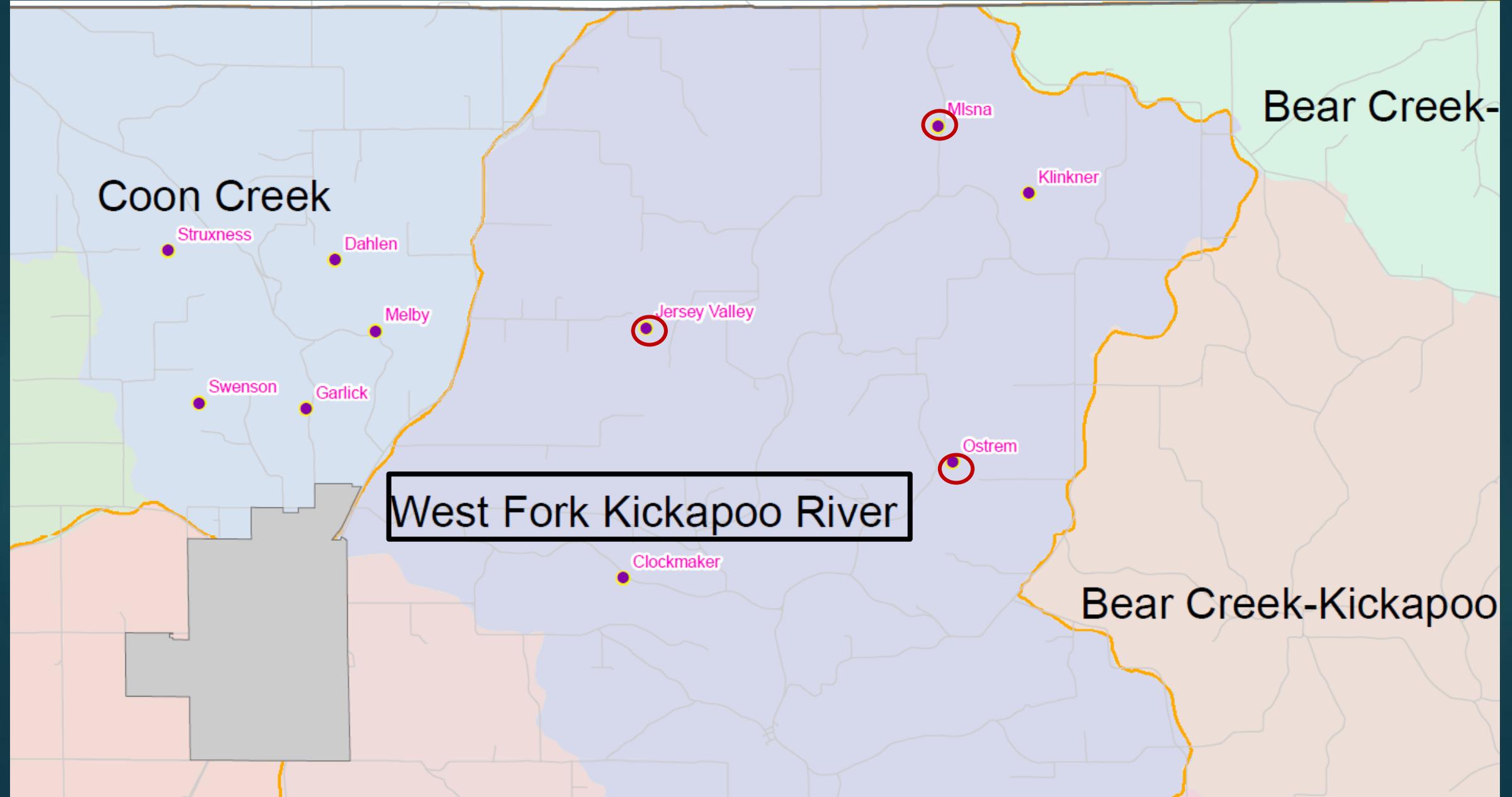


Protect the abutment (Concentrated Flow)

Project cost for 6 Structures (3 Contractors)







Jersey Valley – Auxillary Spillway Failure





Slope Benching

Auxillary Spillway Stabilization





Toe protection

Pool Elevation - Control





11/20/2018 15:44

Misna Dam



08/28/2018



Sand removal / downstream road shaping

Upstream Head Cut pre-stabilization





Head Cut pre-construction



Head Cut excavated and geo placed



Placing rip rap/ Seeding Completed 11-25-2019

WF-03 – Ostrem Dam



Overtopped

Auxillary Spillway Flow





Groin Erosion

Relief Drain Install





Backfilling to final grades – prepping for topsoil



Seeded & Mulched



WF-03 Ostrem (Repair)

Total = **\$22,458.37**

EWP 75%

Vernon County 25%

WF-PM Mlsna – (Stabilization)

Total = **\$15,034.00**

EWP = 67.5%

V.Cty = 25%

FEMA = 7.5%

WF-01 Jersey Valley – (Stabilization)

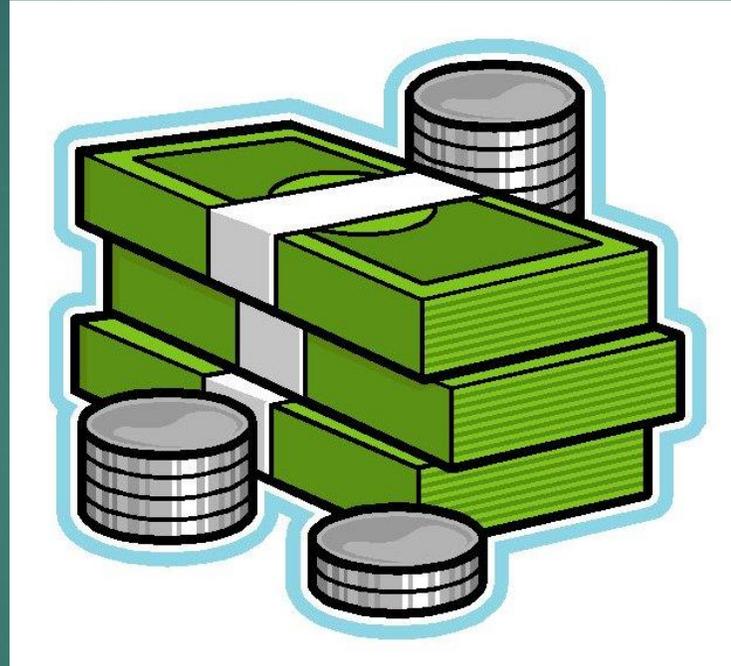
Total = **\$33,777.00**

EWP = \$11,847.75

FEMA = \$13,485.00

V. Cty = \$8,444.25.00

Project Cost







What Went Wrong?

LIFE THREATENING FLOODING NOW!

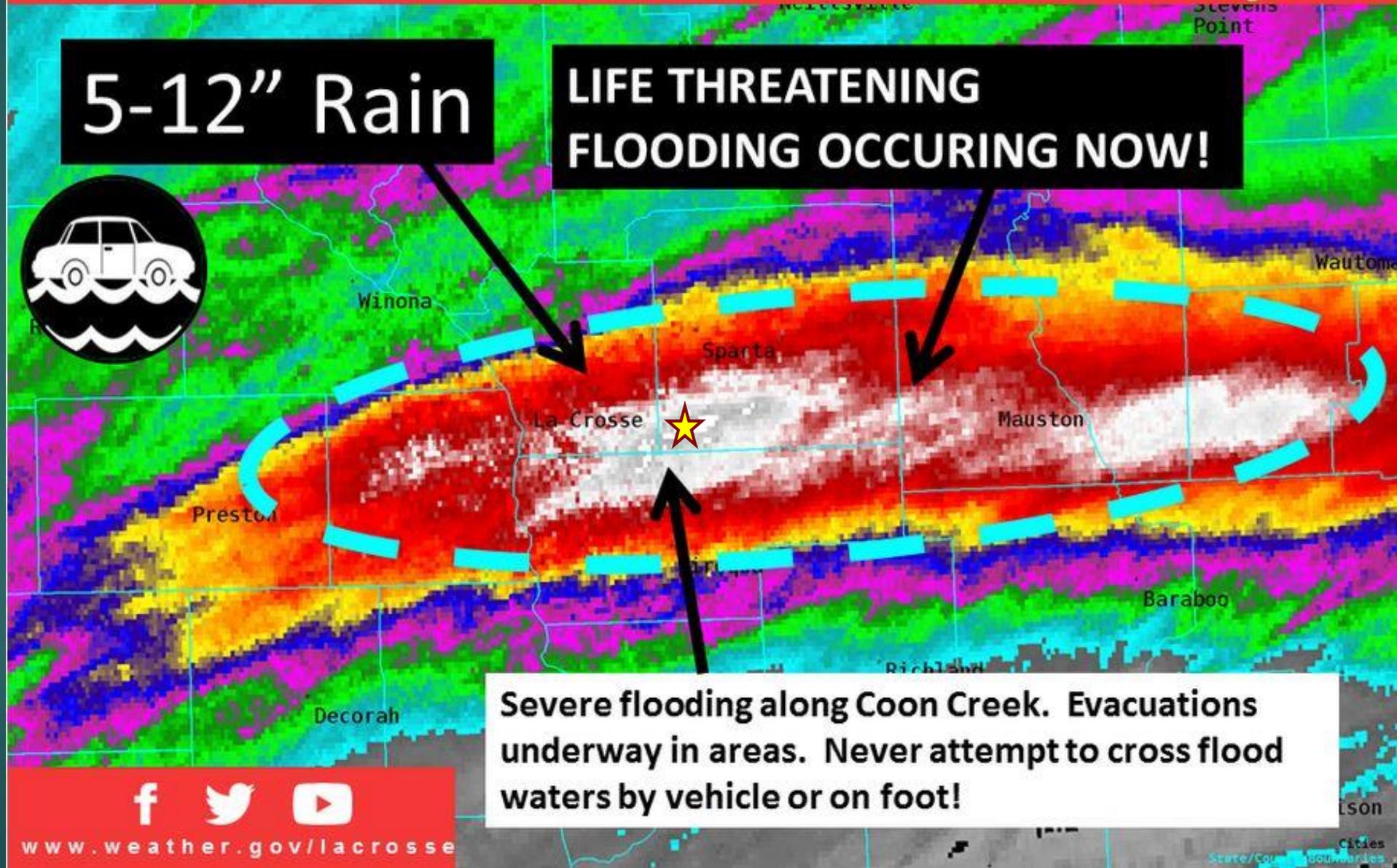
★ Town of Portland
6 of 7 dams over-top

Rainfall Intensity 2-6"/hr.



5-12" Rain

LIFE THREATENING FLOODING OCCURING NOW!



Severe flooding along Coon Creek. Evacuations underway in areas. Never attempt to cross flood waters by vehicle or on foot!

CC23 Dam

August 28th – Water Elevation

Top of Dam



Steve Becker
NRCS – State Engineer



<http://www.co.monroe.wi.us/departments/land-conservation/>

Monroe County PL566 Dams

- ▶ **Abstract of the Engineering Investigation Report**
- ▶ **Investigation Report for Coon Creek and West Fork Kickapoo Watershed**
- ▶ **PL566 Structures – Portland Town Presentation from the Feb 7 Meeting**



Future??



Coon Creek Watershed Study - 2020

- NRCS Funding
- Outsource
- Big Picture

