

MONROE COUNTY PL566 DAMS

- Update on PL566 Dams – Status (Funding/Timelines)
- Coon Creek Watershed
- Building Setbacks (Zoning)
- Citizen Concerns & Questions

FEBRUARY 7, 2019

BOB MICHEEL – MONROE COUNTY LAND CONSERVATION DEPT.- DIRECTOR

August 28, 2018 – Flood Event



Town of Portland (Coon Creek)



Jersey Valley – Dam Breach – (Kickapoo)

Table 1. Small Flood Control Dams Installed by NRCS Programs *

1948 - 1995

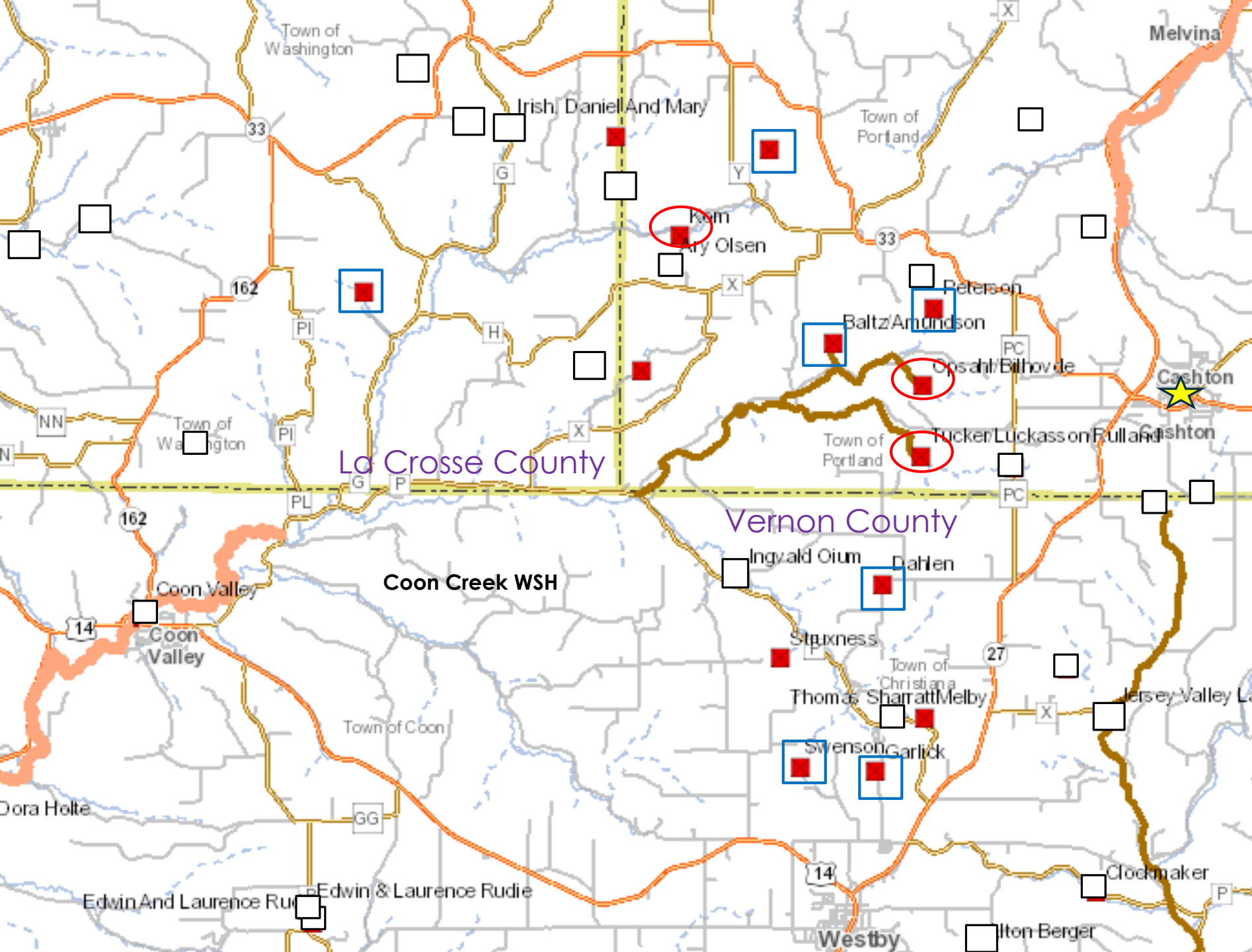
State	Pilots	RC&D	PL-566	PL-534	Total	State	Pilots	RC&D	PL-566	PL-534	Total
AL		7	100		107	NE	93	18	541		652
AK					0	NV			8		8
AR	24	2	144		170	NH			24		24
AZ	2	2	21		25	NJ		1	19		20
CA			10		10	NM	2	2	73		77
CO	32	1	77		110	NY		5	48		53
CT		1	30		31	NC	8	5	72		85
DE					0	ND	10		35		45
FL			9		9	OH	15		42		57
GA	12	10	218	117	357	OK	6	9	965	1114	2094
HI			6		6	OR			5		5
ID			3		3	PA		5	81		86
IL	11		53		64	PB					0
IN		2	118		120	PR			4		4
IA	28	33	659	426	1146	RI					0
KS	38	16	714		768	SC	7	2	77		86
KY	16	1	178		195	SD	2	21	32		55
LA			36		36	TN	5	1	124		130
ME			16		16	TX	60	43	695	1293	2091
MD			16		16	UT			28		28
MA		1	28		29	VT			4		4
MI			13		13	VA	3		102	28	133
MN	8	5	29		42	WA			6		6
MS	3	5	183	388	579	WV	7	4	74	78	163
MO	26	25	531		582	WI	1	1	83		86
MT		1	18		19	WY		2	11		13
TOTAL	420	231	6357	3444	10458						

Wisconsin - 88

Monroe County

8-PL566 Structures
Coon Creek - 7
Kickapoo - 1





Coon Creek Watershed

92,589 Acres

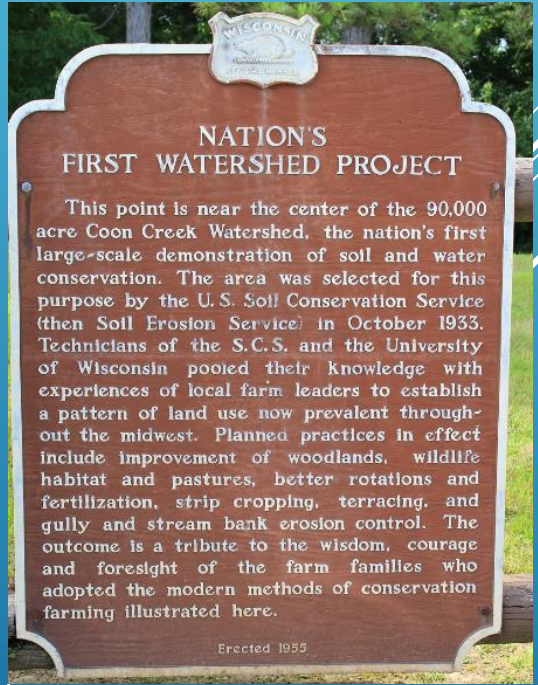
Coon Valley – 49,400 acres

14 - PL566 Dams = 25% D.A.

8 Overtopped & or Spillways ran

3 Structures breached

★ Meeting Location



“National Attention”

Dam Design

Emergency Spillway Crest

Flood Storage (50-100 yr. storm)

Principle Spillway Crest

Sediment Storage – 50 years

Pond Drain Crest



CC23 Dam

August 28th – Water Elevation

Top of Dam



THE FUTURE:

- 1.) RE-BUILD DAMS?
- 2.) RE-BUILD TO NEW STANDARDS?
- 3.) NEW WATERSHED APPROACH?
- 4.) DEVELOP CC WATERSHED PLAN?

Damage Assessment - NRCS

1. Trip Report - Inventory/walk-over complete
2. Eng. Investigation – Total Station survey complete
3. Geology – on-going
4. Failure Analysis – February report
5. Funding Eligibility – on-going
6. Reclassify CC 23 & 25 – on-going





Funding – (3 dam repairs)

1. Federal – (FEMA, NRCS??) 75%
2. State – (DNR) 12.5%
3. County – (LCD) 12.5%
4. Non Agency Sources?

1.) CC31 – Mashak Dam

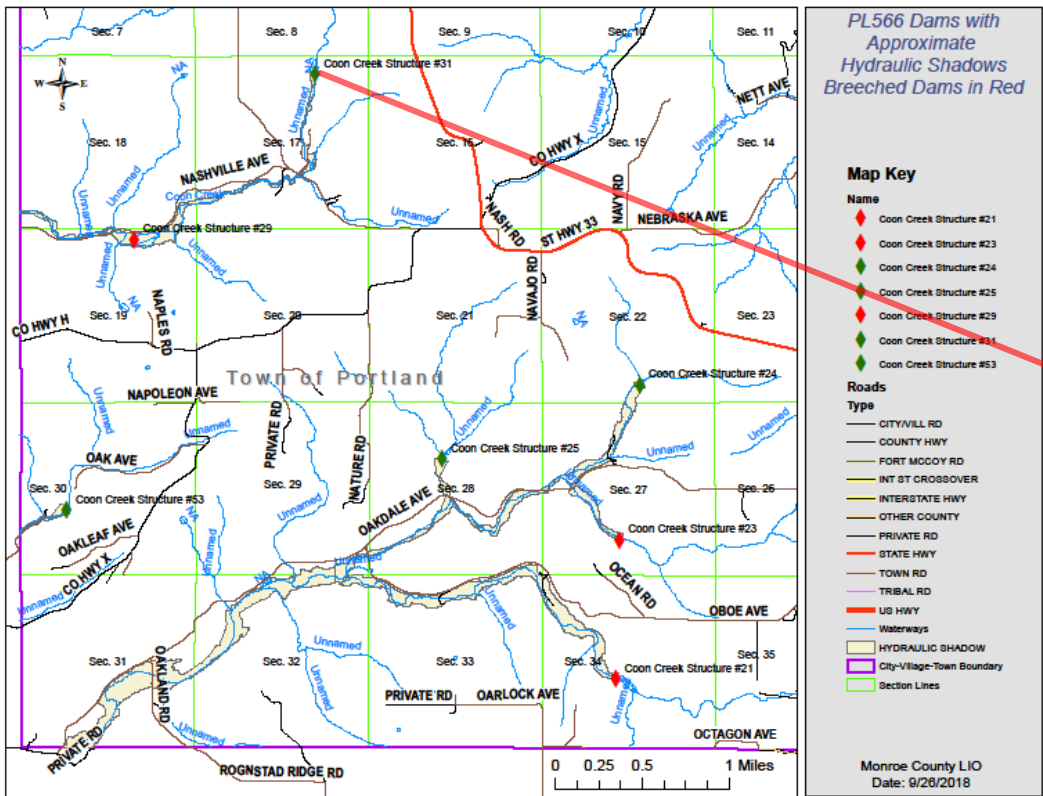
Year Built: 1960-61

D.A. 371 acres

Dam ht. 34.5 ft.

Storage 46 ac. ft.

2019 Repair – County Funding

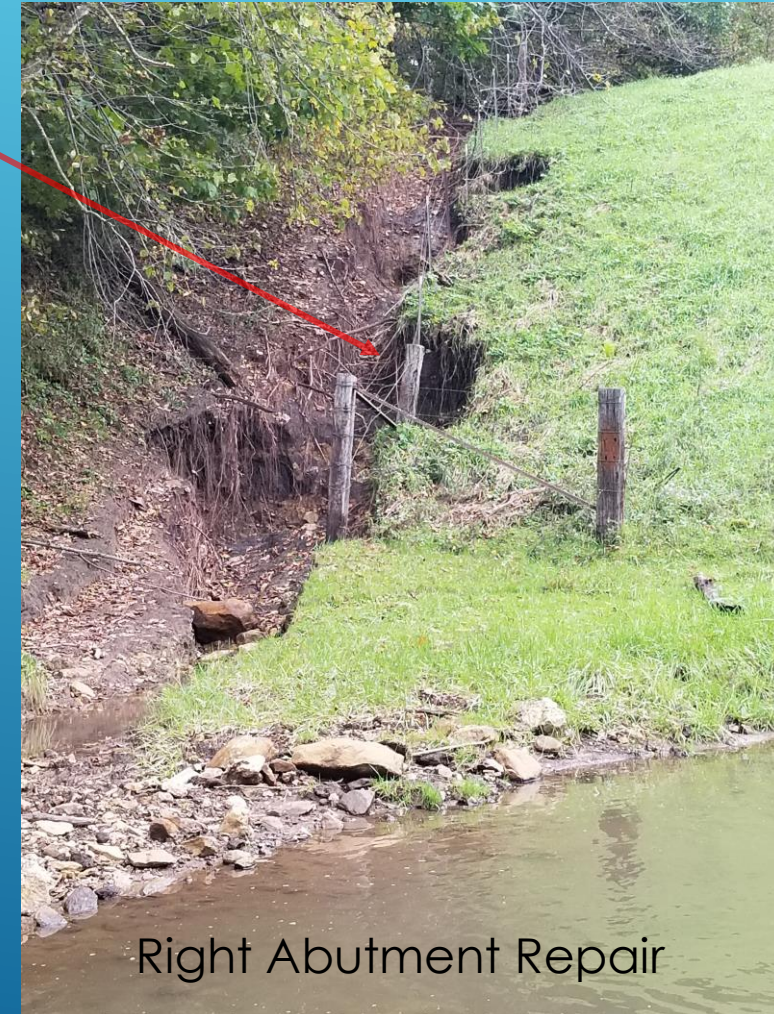


2.) CC24 – Peterson Dam

2019 Repair - NRCS/County Funding
Emergency Watershed Protection (EWP)



Emergency Spillway

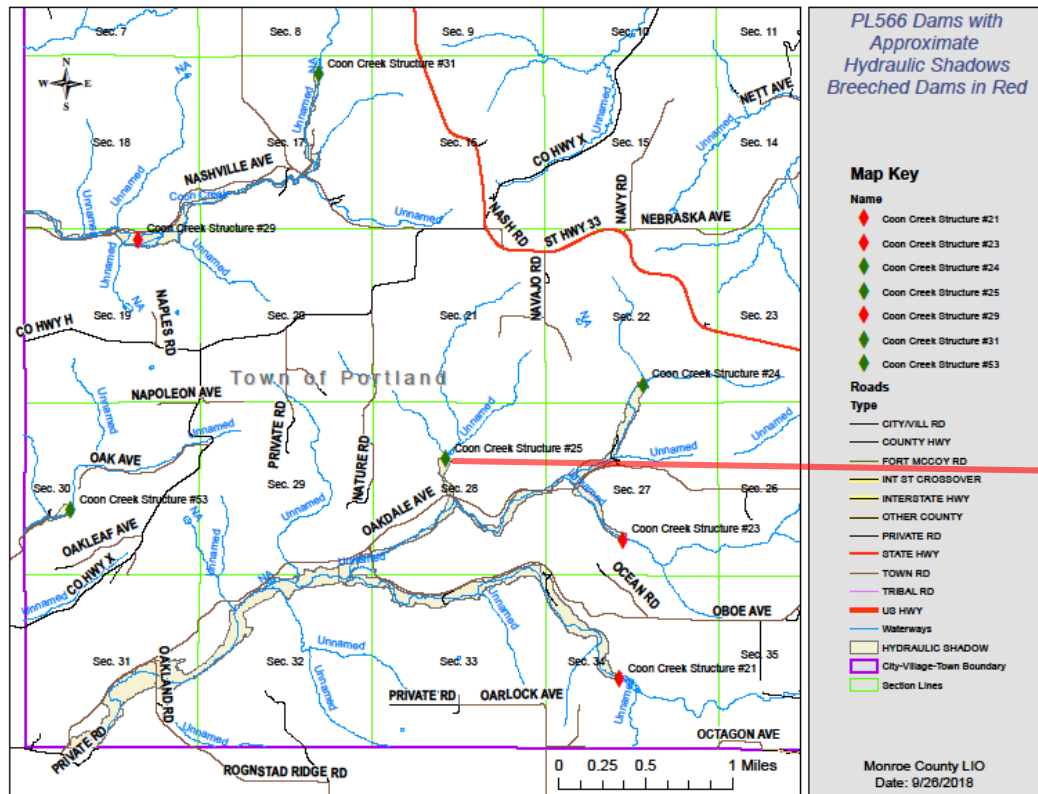


Right Abutment Repair



3.) CC25 – Baltz/Amundson Dam

2019 Repair - NRCS/County Funding



Emergency/Auxiliary Spillway Repair

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.



LEFT ABUTMENT BREACH - 28,000 CU.YD

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.



Left Abutment Breach -17,000 cu.yds.



CC29 – Korn Dam

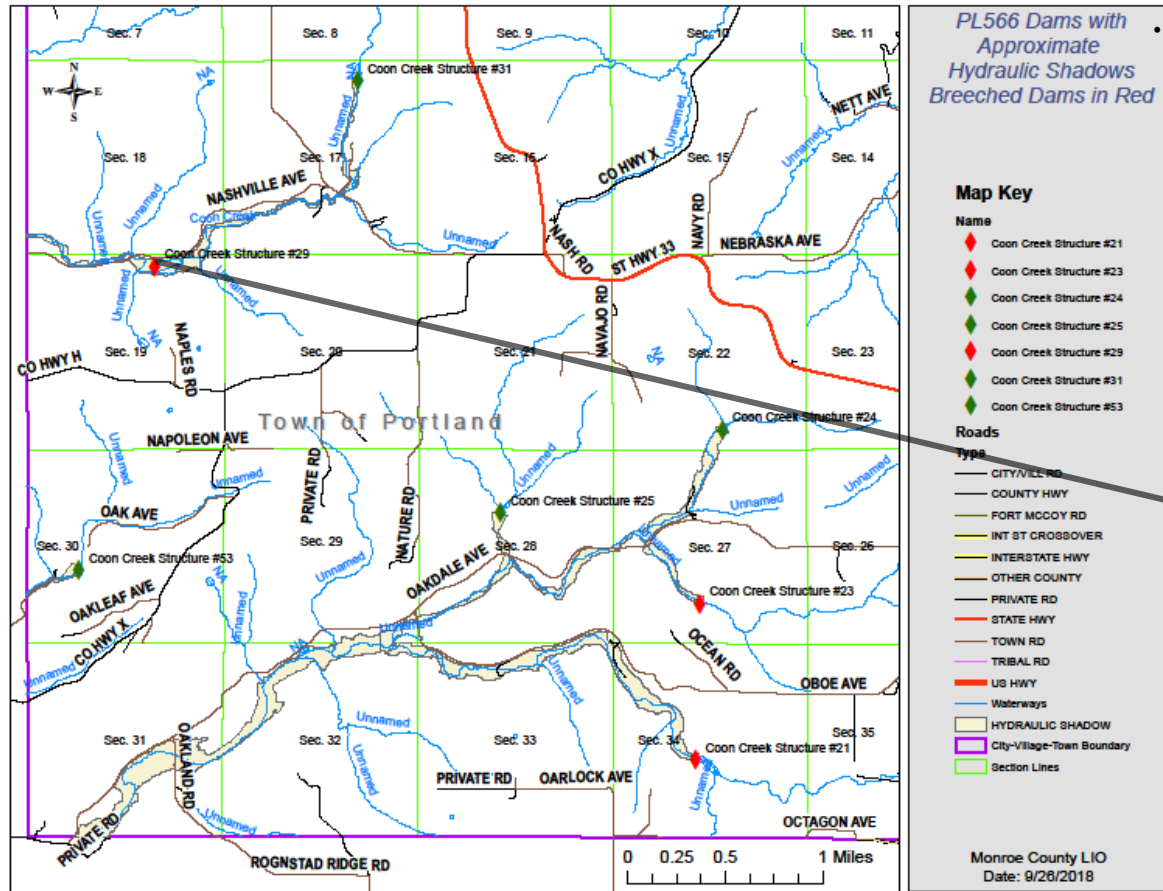
Year Built: 1960-61

D.A. 1,843 acres

Dam ht. 39 ft.

Storage 175 ac. ft.

Combined spillway capacity 635 c.f.s





Left Abutment Breach - 25,000 cu.yds.

Auxiliary Spillway



2019 Action Plan

4.) Head cut stabilization, debris removal & free principle pipe outlets on CC21, CC23, & CC29

Funding = NRCS/County



Head Cut



Pipe Outlet



5.) Reclassify Coon Creek 23, & 25 High Hazard Dams

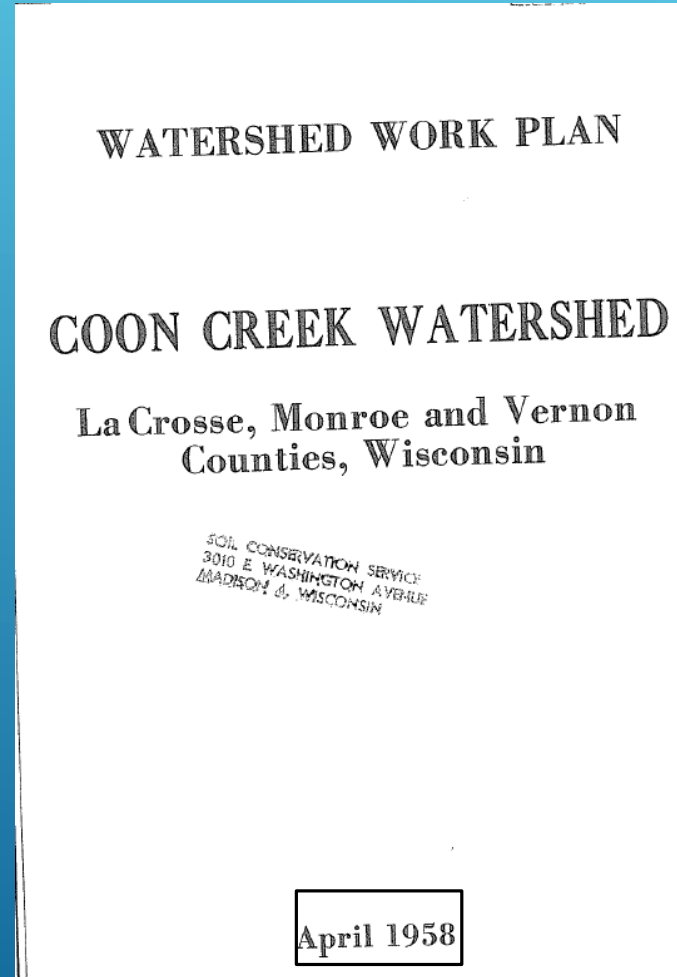
- Meet DNR-333 (100 year principle, 1,000 year total)
- Meet NRCS PMP (Probable Max. Precipitation)
- Options – Rebuild dams to new standard or remove buildings?





6.) Coon Creek Watershed Plan - 2019

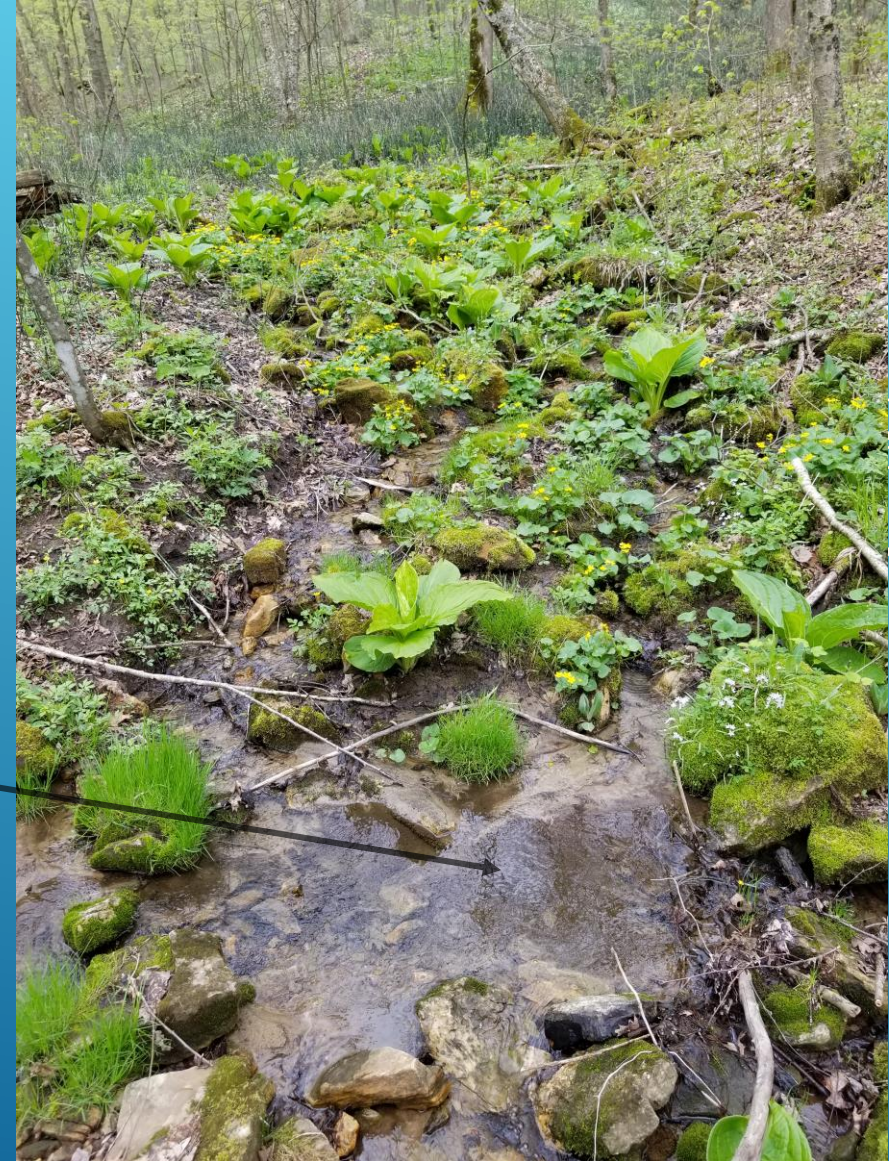
- NRCS Funding
- Outsource
- Big Picture



What has Changed in 61 years?

Land use

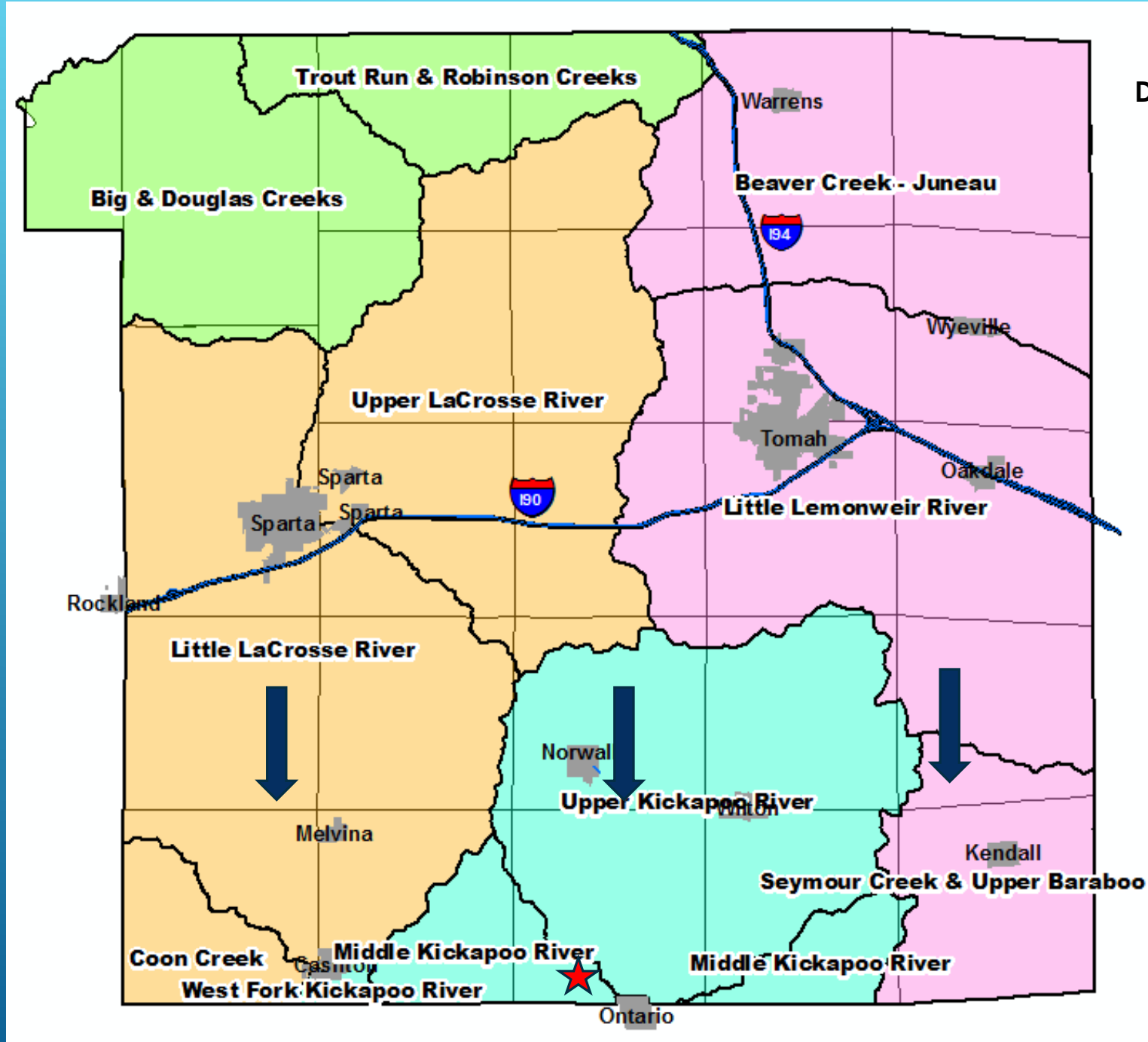
- 60% landowners/farmers implement conservation measures
- Agriculture – rotation/tillage/livestock
- Technology – farming practices, conservation practices design, science, etc.
- Forest parcelization/high grading/access roads
- Development – private and commercial
- County and Town infrastructure
- Population
- Flood Plain – roads, structures, cropping, etc.
- Base Flow/Springs



Ave. Annual Rainfall = 33"
April 3rd – Dec. 31, 2018

★ 60.79"

Monroe County Driftless Area Watersheds



Climate Change: (Driftless Area)

- *Since 2007 – 16 flood events*
- *Since 2000 – Warmest years recorded*
- *Average temperature is +2 degrees*
- *Increase Evaporation*
- *Rainfall Intensity 2-6” hour*



Re-Active vs. Pro-Active



Flood Control – Manage precipitation Impact on the landscape & flood risk!!



- Land Use Planning – Protect Property Values, Flood Mitigation, & Public safety

Shore land Zoning
(Flood Plain)



MONROE COUNTY ZONING DEPARTMENT



SHORELAND VS FLOOD SHADOW SETBACK

- ▶ 1. Shoreland – 75' minimum setback from water body
- ▶ 2. Flood shadow of breach during “1% Chance of Flooding” event (100yr flood)



Monroe County, WI




Legend

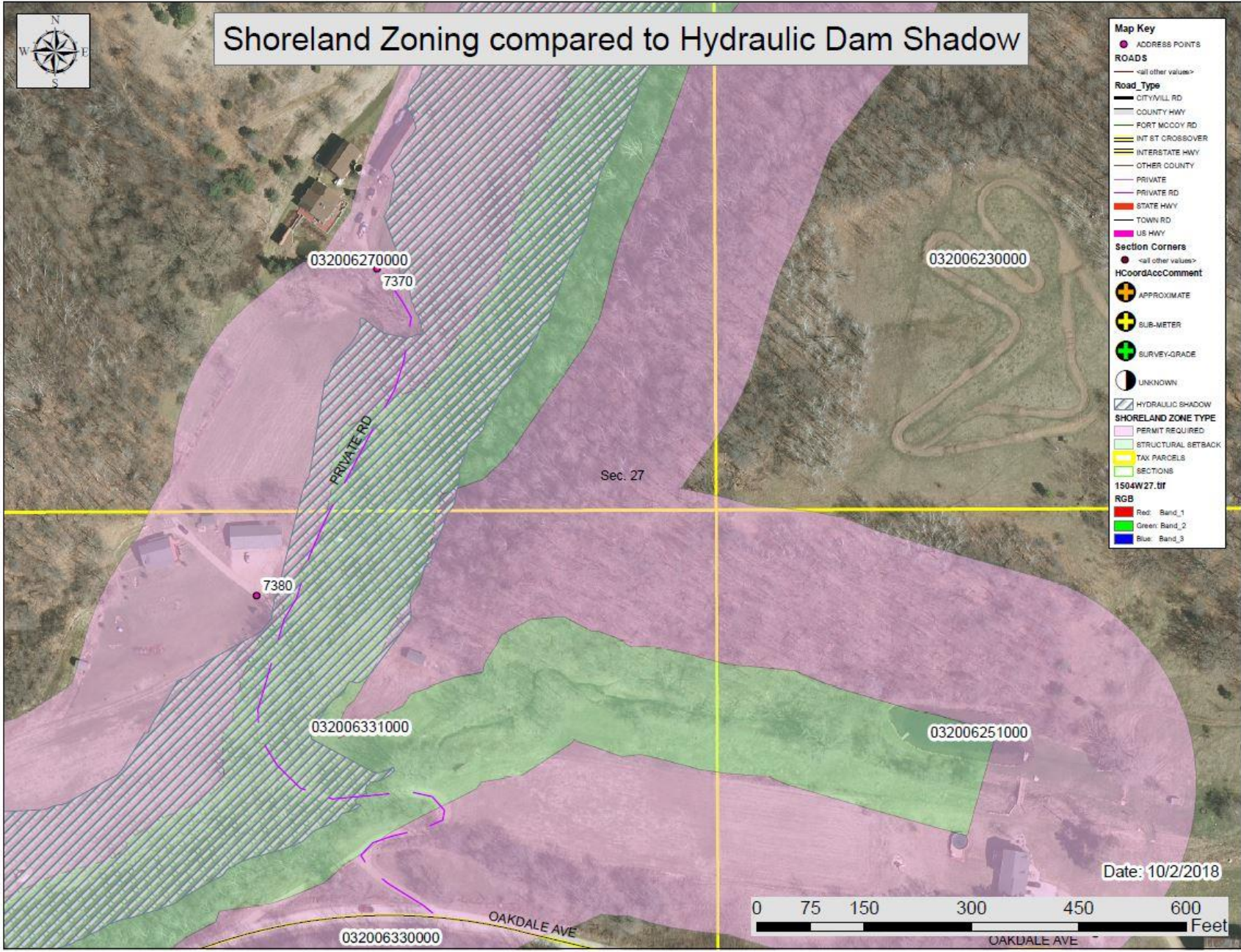
- Addresses
- Lakes and Rivers
- Rivers and Streams
 - FX
 - IF
 - PN
- Parcels
- Parcel Labels
- Towns
- Monroe County
- Other Counties
- Interstates
- US Highways
- State Highways
- County Roads
- Town Roads
- Fort McCoy Roads
- City and Village Roads
- Railroads



DISCLAIMER: This map is not guaranteed to be accurate, correct, current, or complete and conclusions drawn are the responsibility of the user.

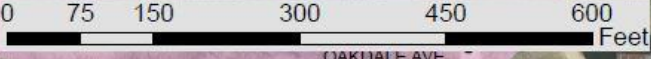
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Shoreland Zoning compared to Hydraulic Dam Shadow



- Map Key**
- ADDRESS POINTS
- ROADS
 - all other values-
 - Road_Type
 - CITY/VILL RD
 - COUNTY HWY
 - FORT MCCOY RD
 - INT ST CROSSOVER
 - INTERSTATE HWY
 - OTHER COUNTY
 - PRIVATE
 - PRIVATE RD
 - STATE HWY
 - TOWN RD
 - US HWY
- Section Corners
 - all other values-
- HCoordAccComment
 - APPROXIMATE
 - SUB-METER
 - SURVEY-GRADE
 - UNKNOWN
- HYDRAULIC SHADOW
- SHORELAND ZONE TYPE
 - PERMIT REQUIRED
 - STRUCTURAL SETBACK
 - TAX PARCELS
 - SECTIONS
- 1504W27.tif
- RGB
 - Red: Band_1
 - Green: Band_2
 - Blue: Band_3

Date: 10/2/2018



CITIZEN QUESTIONS AND CONCERNS?

