

The transformation of
NVF Yorklyn into a
resilient and
sustainable state
asset

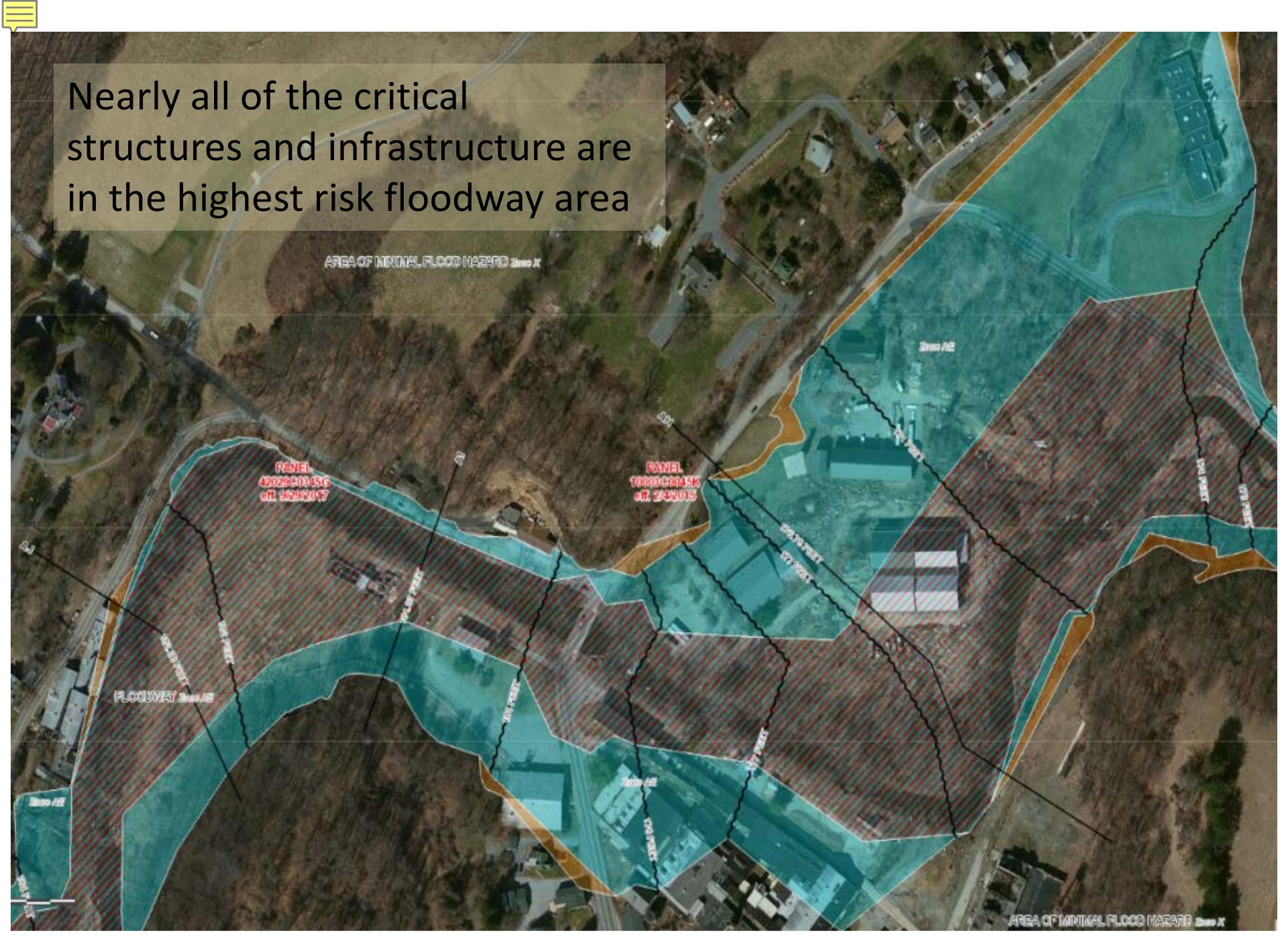


What is sustainability?



Increasing flood heights due to watershed changes
Regulatory (TMDL) constraints on Zinc waste
Nearly 100 year old company facing financial problems
Floodplain uses in which growth = increased impacts

Nearly all of the critical structures and infrastructure are in the highest risk floodway area



4/2010

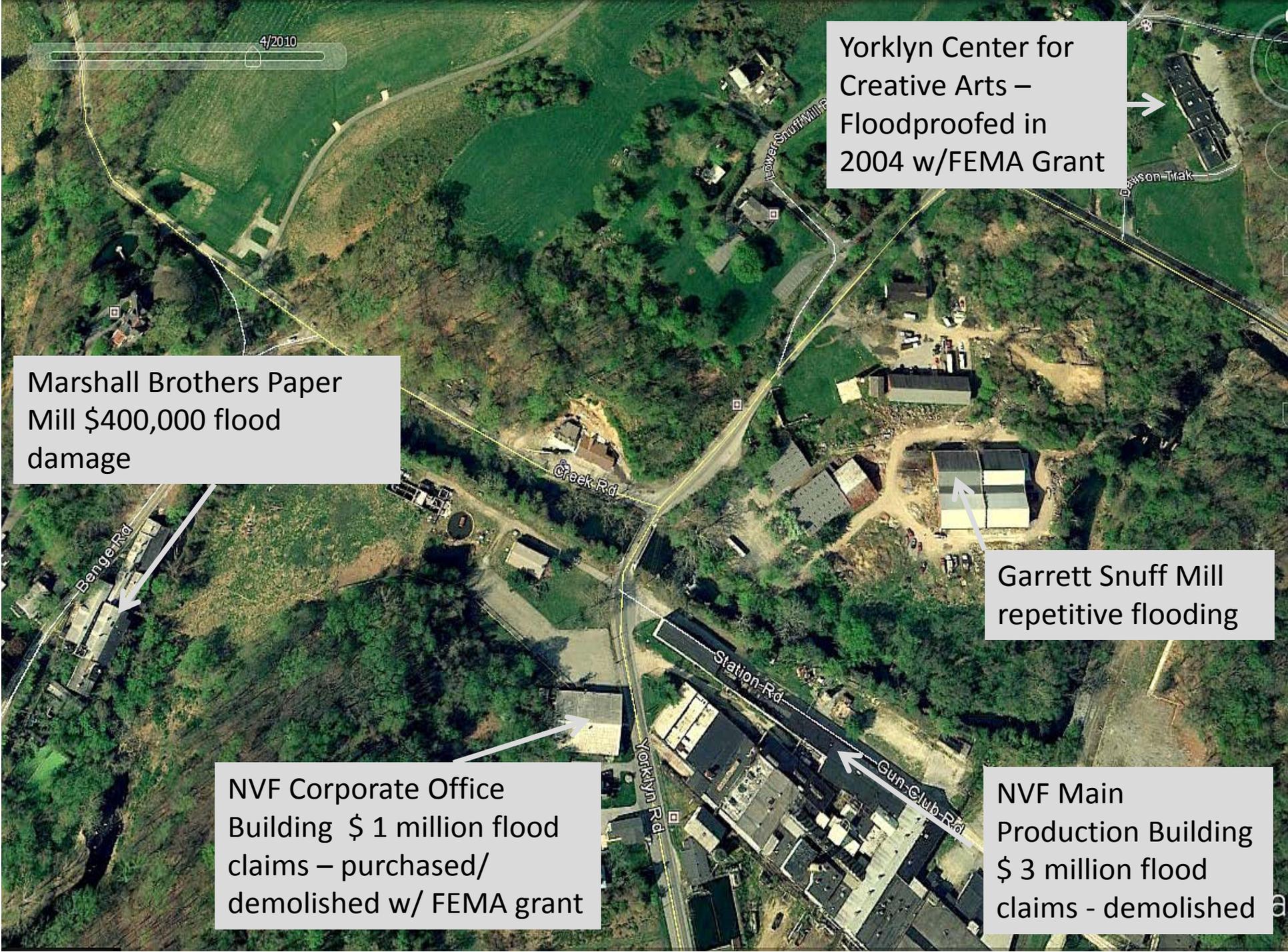
Yorklyn Center for Creative Arts – Floodproofed in 2004 w/FEMA Grant

Marshall Brothers Paper Mill \$400,000 flood damage

Garrett Snuff Mill repetitive flooding

NVF Corporate Office Building \$ 1 million flood claims – purchased/ demolished w/ FEMA grant

NVF Main Production Building \$ 3 million flood claims - demolished



Community Name	Address Line 2	City	Loss	Total Paid	Average Pay
NEW CASTLE COUNTY *	1166 YORKLYN RD - NVF FIBERMILL MAIN COMPLEX	YORKLYN	10	2,912,699.79	291,269.98
NEW CASTLE COUNTY *	[REDACTED]	STANTON	5	2,732,825.42	546,565.08
NEW CASTLE COUNTY *	[REDACTED]	NEWARK	9	2,262,849.42	251,427.71
NEW CASTLE COUNTY *	[REDACTED]	NEWARK	4	1,835,456.64	458,864.16
NEW CASTLE COUNTY *	1166 YORKLYN RD - NVF FIBERMILL BLDG Q	YORKLYN	5	792,049.16	158,409.83
DEWEY BEACH, TOWN OF	[REDACTED]	DEWEY BEACH	5	546,804.56	109,360.91
WILMINGTON, CITY OF	[REDACTED]	WILMINGTON	21	526,232.82	25,058.71
NEW CASTLE COUNTY *	[REDACTED]	STANTON	5	492,190.84	98,438.17
NEW CASTLE COUNTY *	[REDACTED]	WILMINGTON	4	441,990.94	110,497.74
NEW CASTLE COUNTY *	628 BENGE RD - MARSHALLS BROTHERS PLANT	YORKLYN	5	400,889.84	80,177.97
BETHANY BEACH, TOWN OF	[REDACTED]	BETHANY BEACH	7	394,376.81	56,339.54
MILTON, TOWN OF	[REDACTED]	MILTON	4	355,304.22	88,826.06
NEW CASTLE COUNTY *	[REDACTED]	NEWARK	6	285,291.24	47,548.54
NEW CASTLE COUNTY *	[REDACTED]	CHRISTIANA	11	230,732.37	20,975.67
NEW CASTLE COUNTY *	[REDACTED]	NEWARK	4	217,489.91	54,372.48
DEWEY BEACH, TOWN OF	[REDACTED]	DEWEY BEACH	5	211,718.93	42,343.79
NEW CASTLE COUNTY *	[REDACTED]	NEWARK	4	177,035.83	44,258.96
KENT COUNTY *	[REDACTED]	BOWERS BEACH	2	163,883.76	81,941.88
NEW CASTLE COUNTY *	[REDACTED]	CHRISTIANA	6	163,553.86	27,258.98
REHOBOTH BEACH, CITY OF	[REDACTED]	REHOBOTH BEACH	4	150,295.18	37,573.80
NEW CASTLE COUNTY *	[REDACTED]	NEWARK	5	147,618.84	29,523.77
NEW CASTLE COUNTY *	[REDACTED]	HOCKESSIN	7	144,227.27	20,603.90

Severe floods in 1996, 1999, 2003 led to growing awareness that continued occupation of the floodplain was unsustainable.



Flooding characteristics:

little warning

unpredictable severity

high velocity - damage





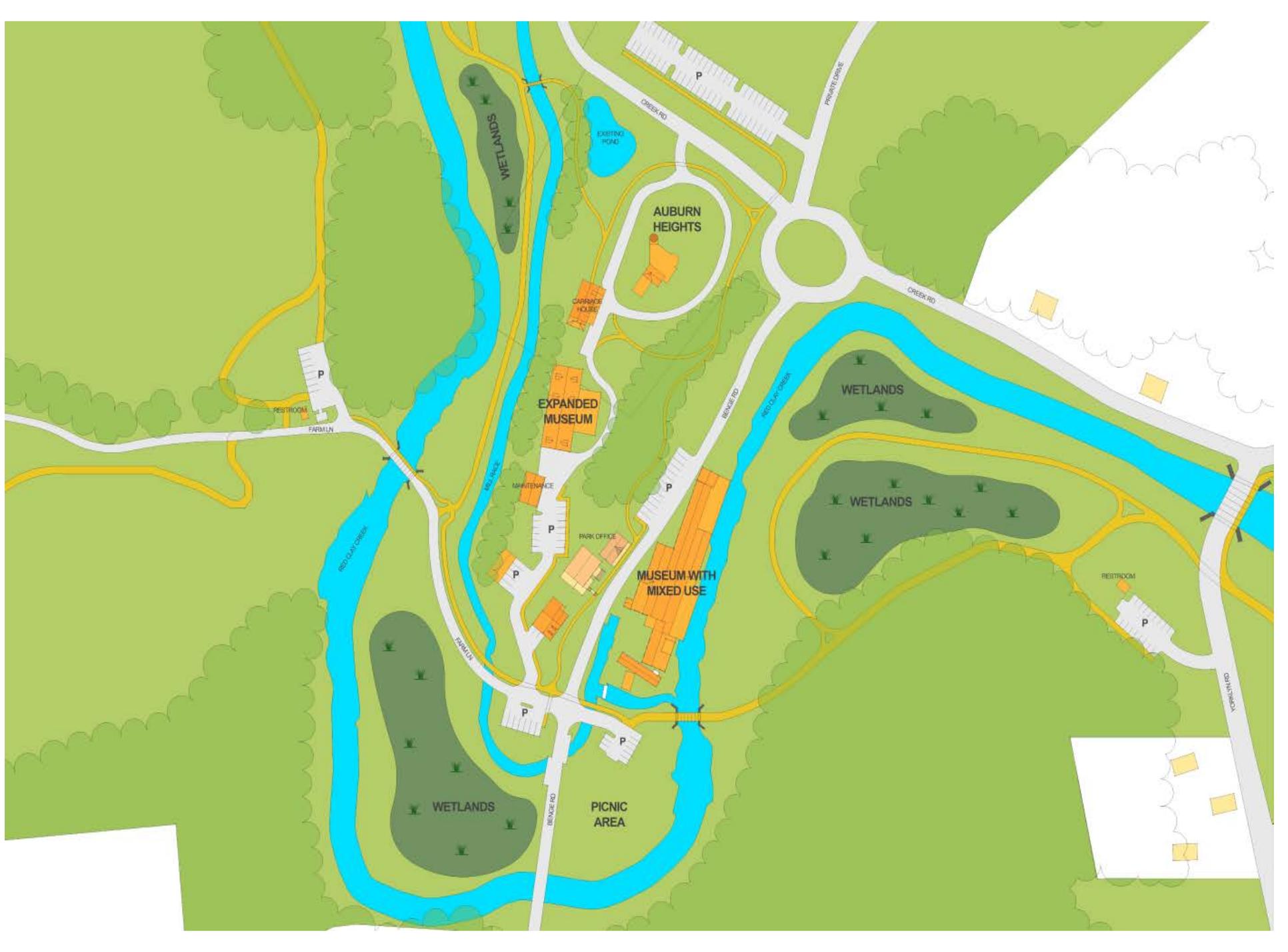
Your DNREC

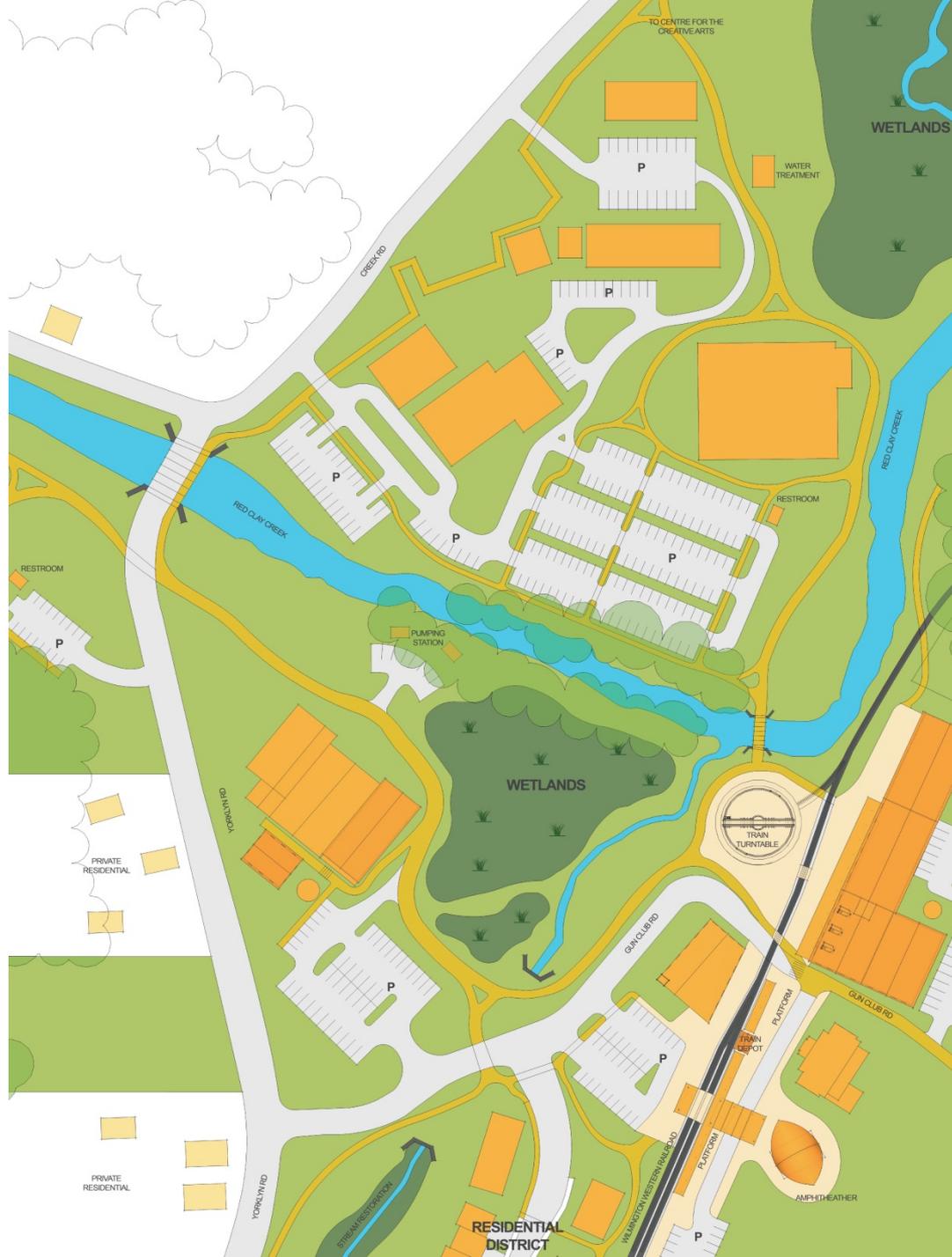
Remediation of the NVF Yorklyn Site

Master Plan



Auburn Valley Master Plan













A few sustainability observations:

Floodplain uses which contribute to lowering rather than increasing flood heights

Floodplain uses which do not impose unacceptable environmental impacts (zinc release > TMDLs)

Floodplain uses (recreation, arts) which can easily be adapted to changing floodplain characteristics