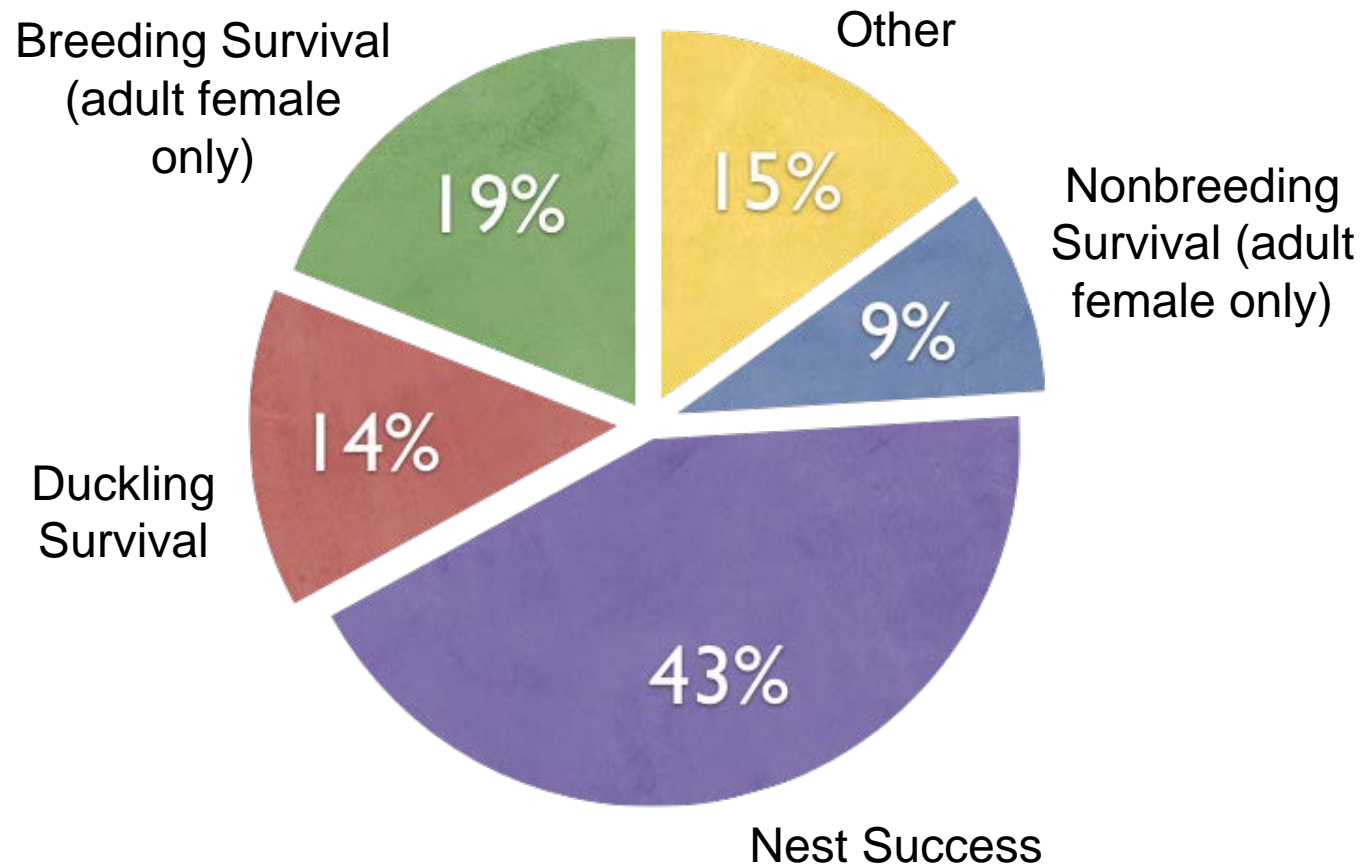




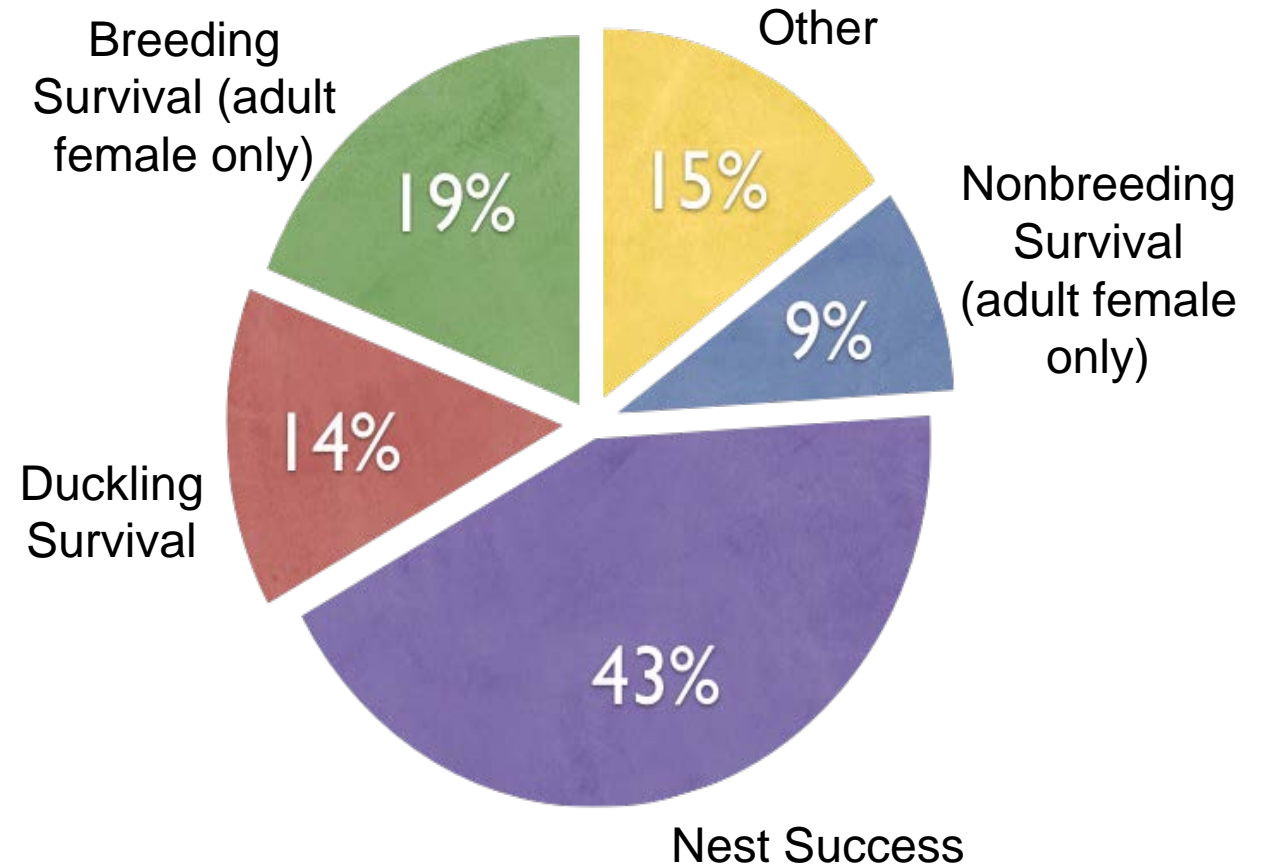
Working Wetlands

Concept----Pilot----Research----Policy

What Drives Continental Duck Populations?



What Drives Continental Duck Populations?



Carrying Capacity

- The reality is that the loss of carrying capacity is almost impossible to overcome with increased production.
- No amount of native grass, planted cover or intensive management can make up for the loss of carrying capacity.
- “Duck Deficit” in Prairie Canada largely driven by loss of ponds. Despite gains in nesting cover, very large deficits remain.



Why a focus on small wetlands?

- Essential driver of prairie nesting ducks (pair ponds, re-nesting and brood survival)
- Wetland loss is nearly always irreversible resulting in lost carrying capacity
- Wetland losses in the PPR seem to be accelerating (93,500 acre loss '97-'09)
- Lack a short-term tool for at risk wetland conservation
- Politically contentious



Value of small prairie wetlands

- Ten one-acre wetlands support **10X** more pairs than one ten-acre wetland

- Broad public benefits

Annually consume 89lbs of N

Annually consume 1.7lbs of P

Annually store .75/ac ft of water

Store 5.87 tons of carbon

But.....



Differing Perspectives on Small Wetlands





*“If the damned things are so @#%\$& **
valuable...”*

- Ag/Conservation Roundtable Summer 2013
- ND Agriculture Department, ND Farmers Union, ND Farm Bureau, ND Stockmen’s Association, ND Grain Growers, individual farmers & ranchers
- Issue of small wetlands in cropland immediately became “900 pound gorilla”
- Focus of the group became developing a tool with the following attributes:
Voluntary, incentive based, term program and allows continued agricultural use
- White paper developed with farm groups around core principles in Winter 2013-14

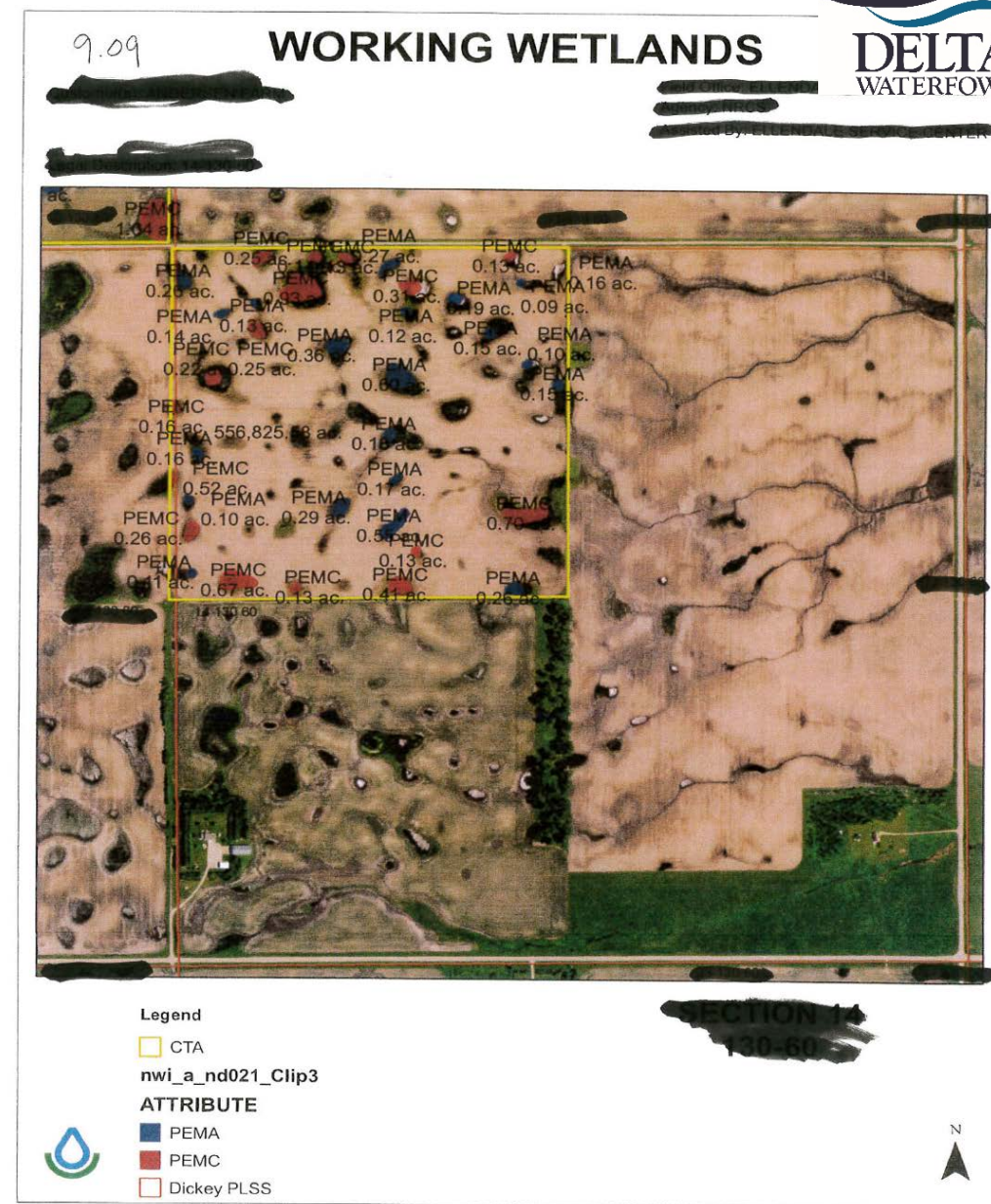
Outdoor Heritage Fund/Pilot

- Secured \$1.75 million from OHF Fall 2014
- Matched with \$3,442,669 from ND NRCS
- Spring 2015 project launch
- Nearly \$3 in offers for \$1 in available funding in 30 day enrollment period
- Prioritized delivery to “best of the best” through partner developed ranking criterion



Pilot Project Stats

- 9,568 wetland basins PEMA/PEMC under 5 acres partially or wholly within cropland
- 4,794.5 acres
- 122 agreements
- 77.2% of agreements greater than 60 pairs
- 21.95% of agreements 40-60 pairs
- Average Cost \$72.44/acre
(\$35.40 Burke-109.40 Sargent)



Human Dimensions Survey Work

- Work with faculty and graduate students to assess producers attitudes of Working Wetlands program
- Intensively survey pilot participants
- U.S. PPR study to survey re hypothetical Working Wetlands program
- Use survey results to advocate for Farm Bill investment as well as refine program



From Pilot to PPR Wide Programing



<u>IA</u>					
	Basins	Acres	Duck Pairs	Rental Rate	Costing
Temporary	8,507	5,415	6,010	\$268.86	\$1,455,876.90
Seasonal	3,469	2,829	1,931	\$268.86	\$760,604.94
Total	11,976	8,244	7,941	\$268.86	\$2,216,481.84
<u>MN</u>					
	Basins	Acres	Duck Pairs	Rental Rate	Costing
Temporary	97,155	36,022	43,813	\$189.26	\$6,817,523.72
Seasonal	80,453	47,312	36,707	\$189.26	\$8,954,269.12
Total	177,608	83,334	80,520	\$189.26	\$15,771,792.84
<u>SD</u>					
	Basins	Acres	Duck Pairs	Rental Rate	Costing
Temporary	358,210	152,091	198,656	\$130.76	\$19,887,419.16
Seasonal	121,893	71,818	76,401	\$130.76	\$9,390,921.68
Total	480,103	223,909	275,057	\$130.76	\$29,278,340.84
<u>ND</u>					
	Basins	Acres	Duck Pairs	Rental Rate	Costing
Temporary	495,966	141,601	231,370	\$65.56	\$9,283,361.56
Seasonal	286,630	159,141	242,819	\$65.56	\$10,433,283.96
Total	782,596	300,742	474,189	\$65.56	\$19,716,645.52
<u>MT</u>					
	Basins	Acres	Duck Pairs	Rental Rate	Costing
Temporary	59,187	24,300	44,389	\$26.20	\$636,660.00
Seasonal	9,581	5,461	13,026	\$26.20	\$143,078.20
Total	68,768	29,761	57,415	\$26.20	\$779,738.20
<u>TOTAL PPR</u>					
	Basins	Acres	Duck Pairs		Costing
Temporary	1,019,025	359,429	524,238		\$ 38,080,841.34
Seasonal	502,026	286,561	370,833		\$ 29,682,157.90
Total	1,521,051	645,990	895,122		\$ 67,762,999.24
Technical Assistance					\$ 8,131,559.91
TOTAL with Technical Assistance					\$ 75,894,559.15



The Opportunity

- Conserve the most at risk wetlands in the US PPR (ND, SD, MN, IA, MT)

Temporary and Seasonal wetlands less than 2 acres partially or wholly in cropland

- 1,521,051 Basins
- 645,990 Acres
- 895,122 Duck Pairs
- Store 484,492.5 ac/ft water annually
- Consume 57,493,110 pounds N annually
- Consume 1,098,183 pounds P annually
- Store 3,791,961.30 tons C

Key Partners

- Jarvis Keney-ND NRCS
- NRCS State and District staff
- Chuck Loesch and Rocky Pritchert-USFWS HAPET
- Eric Lindstrom, Johann Walker, Jonas Davis-DU GPRO
- Rick Warhurst-ND NRT
- Kevin Kadding ND Game and Fish
- Scott McLeod-USFWS PFW