

A Summary of Human Dimensions Research from the North Dakota Working Wetlands Project

The following will provide a summary of results of human dimensions research and survey work undertaken by Delta Waterfowl and North Dakota State University to assess landowner's perspectives towards the Working Wetlands pilot project funded by the Outdoor Heritage Fund.

The focus of the surveys was to understand how to make the Working Wetlands a large scale wetlands conservation tool. We believed the pilot offered a unique opportunity to test a new concept in wetland conservation and availed itself to survey work to understand how the tool was working from the vantage point of the private landowner.

The perspectives gained from the research gave us useful insights into landowner's desires for conservation programming in general while also specifically informing how to improve both improve delivery of the Working Wetlands program while ensuring both high enthusiasm from individual farmers while also retaining key conservation outcomes.

The research was conducted in phases including an initial sample of Working Wetlands participants immediately after contracts were initiated but before payments had been made (2015), a second sample of farmers all across the U.S. Prairie Pothole Region (ND, SD, MN, IA, MT) about a hypothetical Working Wetlands program and a second sample of Working Wetlands participants in the fourth year of the pilot project (2018). The first and third surveys provide the opportunity to see how perspectives have changed over time while the Prairie Pothole Region survey gives insights on how farmers at large, with no first-hand experience with the program, feel about the program attributes.

The following will represent some of the high level results from the research.

- Most landowners supported use of incentives for wetlands conservation.
- Landowners identified contract attributes including payment level and guaranteed source of income as important in their decision-making regarding conservation program participation.
- Effect of program participation on soil quality and erosion control were also considered important.
- Attitudinal questions revealed that landowners in general agreed that they should be consulted on wetlands programs, promoting healthy ecosystems is a landowner's responsibility, and landowners have the right to decide land use.
- Landowners also responded that they should be compensated for land use choices that benefit the environment, including for maintenance of wetlands, and should be able to

farm wetlands. They agreed that wetlands are important for wildlife and their conservation is important.

- Landowners preferred shorter contract lengths. For the average respondent, a one year increase in contract length requires an approximately 0.80% increase in rental payment.
- Landowners prefer a higher rental payment and a contract that adjusts payment midterm over a fixed-rate contract. The average landowner would be willing to forego approximately 2.3% in rental payment if the contract moved from having no midterm adjustment to having a midterm adjustment.
- Landowners value the right to conduct managed burning on their lands containing program wetlands, with the average landowner willing to accept a 7.4% reduction in rental payment in exchange for being allowed to conduct managed burning.
- The requirement to apply additional conservation practices (e.g. no till, cover crops, etc) on cropland surrounding program wetlands reduces landowners' desire to enroll, especially when they grow row crops on these lands. The average landowner would demand a 7.4% increase in rental payment to accept the requirement that one of three conservation practices be employed on crop acres surrounding wetlands.
- There was little difference in attitudes between the first and fourth year surveys of the Working Wetlands Program participants while positive feedback was provided in both sampling frames.
- Level of agreement that "Small wetlands have benefits for my operation" increased from year 1 to year 4 of the program. And, those in the program more strongly agree (and very strongly agree) that they should be able to farm their wetlands when feasible; that is, the program is attracting those who value greatly the flexibility in use of their wetlands.
- Producer agreement that the terms of the Working Wetlands Program are a good fit for their land in the long run remained very strong and increased over the period of the program.
- Producers continued to strongly agree that they would not have enrolled in the Working Wetlands Program if they were not allowed to continue farming their wetlands when possible.
- Program pricing was shown to be highly elastic from a low of 30% of NASS county rental rate to a high of 100% of NASS. Optimal pricing structure was concluded to be 71.6% of NASS county rental rate and both ensures high demand from landowners and responsible use of program funds.