

United States Department of the Interior



FISH AND WILDLIFE SERVICE
Mountain-Prairie Region
CHASE LAKE National Wildlife Refuge
Wetland Management District
& Prairie Project
5924 19TH Street SE
Woodworth, ND 58496-9360
(701) 752-4218
February 4, 2013



Dr. Bill Arnold
Prairie Pothole CZO
University of Minnesota
Via email: dmushet@usgs.gov

RE: Letter of Support

Dear Dr. Arnold:

This letter is a confirmation of discussions between the U.S. Fish and Wildlife Service's (USFWS), Chase Lake headquarters office and the U.S. Geological Survey, Northern Prairie Wildlife Research Center (NPWRC), for the creation and operation of the Prairie Pothole Critical Zone Observatory (PPCZO).

After review of your proposal and discussions with Dave Mushet of NPWRC, for the establishment of the PPCZO here at the Chase Lake headquarters, Woodworth Station Waterfowl Production Area (WPA), the Chase Lake headquarters is in support of creating the PPCZO here at the headquarters with the following understandings.

- 1) A Board of Review will be created to vet proposed studies/research at the PPCZO to insure studies/research are Compatible with USFWS Regulations and Policy, and to insure studies/research are within the PPCZO parameters and guidelines, and to insure studies/research will not interfere with existing studies, research, management, and/or administration of the Chase Lake headquarters and/or the Woodworth Station WPA. The Board of Review will have at a minimum of 30 days to review such proposals.
- 2) This Board of Review will be composed of yourself, a member of NPWRC, and the Refuge Manager of the Chase Lake headquarters. Ultimate veto power will resign with the Refuge Manager of the Chase Lake headquarters.



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- 3) USFWS, Chase Lake headquarters, will receive an annual update regarding the status of the PPCZO. This update will include detailed annual synopsis's of current studies/research, as well as proposed studies/research.
- 4) Once a study/research project has been completed, USFWS, Chase Lake headquarters will receive a full copy of the study/research and will have access to any data that had been collected.

The Chase Lake headquarters realizes the strong connection between the creation of the PPCZO here and it's relation to the past, current, and future research that has and will continue to be conducted here at the Woodworth Station WPA. We see the creation of the PPCZO here as an excellent opportunity for the science community to utilize the resources here to broaden our knowledge of the Prairie Pothole ecosystem, and with that we are in full support of the project.

Sincerely,



Neil Shook
Refuge Manger
Chase Lake NWR/WMD/PP



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Notes from Critical Zone Observatory Meeting with Dave Muschet, NPWRC, 02/01/2013

A Critical Zone Observatory (CZO) is very similar to the NEON project whereas it is a facility/area where data is gathered and tied to a national network and that data is accessible to anyone to use. The difference with a CZO and NEON is that this CZO will be more representative at a local scale, specifically tied to the PPR.

The data proposed for collection will allow for the better understanding of the biogeochemical processes that developed the wetlands (essentially from the bedrock to the plants), and understand how these processes may change overtime and how we may be able to use this information in our management. This is complimentary to the work that already has been done at Cottonwood lake and WWS. It is a continuation of the work, such as the I&M project we have with NPWRC and the vegetation at WWS.

The current proposal is to run the three hypotheses in the proposal. It is necessary for the research/data collected to be management applicable. One of the hypothesis under this proposal is tied to wetland/upland vegetation, especially non-native spp such as Reed Canary, and the potential for such vegetation to actually increase the amount of greenhouse gases within the atmosphere.

The CZO will open the door for more applied research by having established baseline data for the area and it's systems.

There will be no infrastructure installed such as with NEON. Depending on the research, there may be instruments used but all can be covered by the issuance of SUP. No need to establish an MOU as with NEON.

Research will not interfere with Station's management activities. Again, FWS will have final say with what occurs on FWS lands.

CZO administration – William A Arnold, U of Minn.; Dave Muschet, NPWRC; Shook, FWS. Dixon proposed developing a matrix/flowchart for study decision/approval. This would include Arnold, Muschet, Shook. FWS would ultimately have the veto power on what happens on Service lands.

-Discussed the need for a liaison between NPWRC and CL to aid in coordinating research activities such as NEON, CZO, NPWRC studies. Will need to meet with Gleason and discuss. This is another step in bringing NPWRC back into providing FWS with the applied research that we are in need of.