

RM-CESU PROJECT COMPLETION REPORT, October 2012

*Cooperative Agreement H1200090004
Task Agreement FBMS# P09AC00185 (J2120090011)
Project number MSU-202 and MSU-186*

Project Title: Natural Resource Inventory & Monitoring Technical & Operational Support

Park/Unit: Greater Yellowstone I&M Network

Funding Sources: Greater Yellowstone Network, Inventory and Monitoring Program

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Project Description:

This project with Big Sky Institute provided a wide range of technical and administrative support to assist the Greater Yellowstone Network on designing and implementing scientifically robust and credible monitoring protocols. The objectives of this task agreement were to:

1. To design and test robust sampling strategies, that will enable the Networks to achieve monitoring and sampling objectives identified in their protocol development summaries, protocol narratives, and their Network monitoring plans.
2. To use long-term data sets available from the NPS and research community-at-large to inform the Network monitoring protocols, and to ensure that data collected by the Networks are broadly applicable for use in larger regional analyses and applications.
3. To complete all necessary written sampling design components of a comprehensive monitoring protocol and Network monitoring plan, following NPS I&M guidelines.

Project Results and Citations:

- Irvine, K. M., K. Manlove, and C. Hollimon. 2012. Using Power Analysis and Trend Analysis to Detect Trends in Monitoring Data: An Example of Water Quality in the Greater Yellowstone Inventory and Monitoring Network. Natural Resource Report NPS/GRYN/NRR—2012/556. National Park Service, Fort Collins, Colorado.
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- Jean, C., R. Daley, M. T. Tercek, and S. T. Gray. 2011. High elevation national parks: 2010 climate summary report. Natural Resource Data Series NPS/GRYN/NRDS—2011/203. National Park Service, Fort Collins, Colorado.
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- Ostermann-Kelm, S., W. Gould, S. Wolff, R. Daley, and R. Bennetts. 2012. Summary and evaluation of landbird monitoring in Grand Teton National Park, 2005-2008. Natural Resource Technical Report NPS/GRYN/NRTR—2012/622. National Park Service, Fort Collins, Colorado.
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- Tercek, M. T., and S. T. Gray. 2010. Greater Yellowstone Network: Climate of 2009. Natural Resource Report NPS/GRYN/NRR—2010/262. National Park Service, Fort Collins, Colorado.
https://irma.nps.gov/App/Reference/DownloadDigitalFile?code=433026&file=Tercek_Gray_2010_NPS_NRR262_GRYN_Climate_2009.pdf.
- Tercek, M.T. 2010. Yellowstone Northern Range Riparian Willow Inventory Final Report.
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- Tercek, M.T. 2011. Distribution of Eriogonum umbellatum var. cladophorum. Final_First_phase_Report_September_2011.
- Tercek, M. 2012.Upland vegetation monitoring in Bighorn Canyon National Recreation Area: Analysis of 2011 pilot data. Natural Resource Data Series NPS/GRYN/NRDS—2012/280. National Park Service, Fort Collins, Colorado.
https://irma.nps.gov/App/Reference/DownloadDigitalFile?code=447568&file=NP_S_GRYN_NRDS_280_Upland_Veg_Monitoring_BICA_2011_Pilot_Data_nrss.pdf.
- Tercek, M.T., S. Gray, and C. Nicholson. 2012. Climate Zone Delineation: Evaluating approaches for use in natural resource management. Environmental Management. Pages 1076-1091. DOI: 10.1007/s00267-012-9827-4.
<https://irma.nps.gov/App/Reference/Profile/2189138>.