

**Project Summary**  
**Rocky Mountains Cooperative Ecosystem Studies Unit**

<b>Project Title:</b> Greater Yellowstone Inventory & Monitoring Network (GRYN) : Phase 2 Report Collaboration
<b>Type of Project:</b> Technical Assistance/ interdisciplinary
<b>Funding Agency:</b> National Park Service
<b>Effective Dates:</b> February 15, 2003 - September 30, 2004
<b>Funding Amount:</b> \$24,975
<p><b>Investigators and Agency Representative:</b>  NPS KEY OFFICIAL: Cathie Jean, Program Manager, Greater Yellowstone Network, Forestry Sciences Lab, 1648 S. 7th Ave, Bozeman, MT 59717-2780 406.994.7530, <a href="mailto:Cathie_jean@nps.gov">Cathie_jean@nps.gov</a>.</p> <p>UNIVERSITY CONTACT: Dr. Duncan T. Patten, Big Sky Institute, Montana State University, Bozeman, MT 59717-3490, 406.582.0594, email: <a href="mailto:dtpatten@montana.edu">dtpatten@montana.edu</a>,</p>
<p><b>Project Abstract:</b>  The purpose of this project is to provide critical expertise and assistance to the Greater Yellowstone I&amp;M network with the development and preparation of Chapter III of the Phase 2 GRYN Vital Signs Monitoring Plan. Chapter III is entitled "Conceptual Models" and is intended to explain the understanding of drivers, stressors and ecological effects of selected resource components of the GRYN parks and will provide a basis for identification and selection of appropriate ecological indicators for GRYN park health and integrity. Dr. Duncan Patten is an acknowledged expert in Greater Yellowstone Area riparian and wetland ecosystem structure and function and will contribute sections to Chapter 3 on riparian and wetland ecosystems.</p>
<p><b>Outcomes with completion dates:</b>  Conceptual models as assigned - May 5, 2003  Park overview &amp; general conceptual models - Yellowstone National Park  Narrative overview - drivers, stressors, function, structure, etc., General schematic model of park, Table of relevant temporal &amp; spatial scales, Map of HUC 6 watershed aggregates, Table of relevant primary ecosystems  Ecosystem overview and conceptual models - Riparian Systems  Overview of Riparian types, drivers, stressors, function, structure, Relevant spatial and temporal scales, General schematic conceptual model  Ecosystem overview and conceptual models - Wetland Systems  Overview of wetland types, drivers, stressors, function, structure, relevant spatial and temporal scales, General schematic conceptual model  Ecosystem overview and conceptual models - Alpine and timberline systems  Overview of alpine and timberline types, drivers, stressors, function, structure, relevant spatial and temporal scales. General schematic conceptual model.  Ecosystem variability across HUC units for riparian, wetland and alpine systems. Table of ecological elements across HUC aggregates  List of candidate vital signs - May 2, 2003  Dr. Patten will travel to Jackson and Mammoth, WY and possibly Bighorn Canyon for workshops or discussion on development of Vital Signs. He will be in Bozeman, MT and participate in a multi-day workshop @ Montana State University to participate in a group setting to identify and select ecological indicators and vital signs for GRYN parks.  Chapter 3 Report - May 15, 2003</p>
<b>Keywords:</b> Greater Yellowstone Network, inventory and monitoring; conceptual modeling, vital signs
<p><b><i>For Administrative use only:</i></b>  Date Annual Report Received:</p> <p>Date Final Report Received:</p>

*Publications, etc. on file:*