



Human Demographics and Development Monitoring

Importance

Land-use activities outside park borders can pose substantive threats to park resources. Encroaching urbanization increases the risk of edge effects, including loss of critical habitat and migration corridors, water pollution, and disruption of hydrologic flow regimes. Adjacent agricultural development increases the threat of erosion, altered flow regimes, and agro-chemical pollution on park lands. More distant land-use activities—for instance, dam operations and industrial air pollution that may originate hundreds of miles away—can also be detrimental. Monitoring the status and trends of such activities may help us to understand the reasons for changes on park lands. Monitoring land-use indicators with known linkages to ecological function can also help us to predict how park resources may be impacted over time. Managers may use land-use information to anticipate mitigation for park lands, motivate conservation agreements with private or other public agencies, and influence change in area land-use policies.



Golf course at the urban-park interface, Colorado National Monument.

Current Status of Protocol

Although human demographics were identified as a high-priority vital sign in the NCPN's Phase III Monitoring Plan, the development of this protocol is currently postponed. At a programmatic review of the network in January 2008, it was determined that the NCPN needed to focus its efforts on developing and implementing 10 other protocols across 16 network parks for the near future. At this time, we do not anticipate beginning development of the human demographics protocol until at least 2013, when the network's next program review is scheduled to occur. At that time, the NCPN will examine all protocols and determine if there are efficiencies in other protocols that will allow us to initiate the development of this protocol.

Contact

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Management Applications

When implemented, information from human demographics and development monitoring will:

- Provide park managers with information on extra-local activities that can influence park resources;
- Help park managers to discern between natural and human-caused changes in park resources; and
- Help park managers to develop mitigation options for reducing or eliminating human-caused effects on park resources.



Gas drilling is common on the Colorado Plateau.

Surrounding land uses can contribute to the spread of exotic invasive species onto park lands. Russian olive, pictured here, is an introduced ornamental now present in many NCPN parks.

