

Quick Guide to Some Key Climate Change Adaptation Activities

Compiled for NFWPCAS Steering Committee (Jan 27, 2011)

| ACTIVITY (weblink) | PURPOSE | PRODUCTS (due date) | LEAD | PARTICIPANTS | STATUS | CONNECTIONS TO NFWPCAS |
|--|--|--|--|--|---------|--|
| National Scale | | | | | | |
| National Fish Wildlife Plant Climate Adaptation Strategy (NFWPCAS) | Produce National Fish Wildlife and Plant Climate Adaption Strategy involving govt and nongovt partners by 2012 | Draft strategy (Oct 2011) Final strategy (May 2012) | USFWS NOAA States | Intergovernmental Steering Committee and many others | ongoing | |
| National Climate Assessment (NCA) http://www.globalchange.gov/what-we-do/assessment | Produce National Assessment of (1) impacts of climate change on US regions, sectors and (2) needs to address impacts | Draft NCA (July 2011?) Final NCA (2013) | USGCRP with broad-based Steering Committee | Govt and nongovt | ongoing | Will include focus on climate impacts on ecosystems that can help inform NFWPCAS development |
| Interagency Climate Change Adaptation Task Force (ICCATF) http://www.whitehouse.gov/administration/eop/ceq/initiatives/adaptation | Provide recommendations on fed govt actions to advance climate adaptation | Report to President called for variety of efforts including NFWPCAS, Water Adaptation Strategy, federal agency adaptation strategies | CEQ OSTP NOAA | Federal agencies | Ongoing | Called for NFWPCAS and use of “ecosystem-approaches to adaptation” as top principle of US adaptation efforts |
| National Ocean Council (NOC) http://www.whitehouse.gov/administration/eop/oceans | Established by President to lead efforts to advance/implement nation’s ocean policy efforts | Action plans to address 9 priority issues including “Strengthen resiliency and adaptation of coastal and ocean environments and communities” | CEQ | Federal agency council | Ongoing | Opportunity for collaboration on adaptation strategy for coastal and ocean resources |
| US Global Climate Research Program (USGCRP) Adaptation Science Strategy http://www.globalchange.gov/ | Develop strategy to advance science in support of climate adaptation | Adaptation Science Strategy | USGCRP | Govt and nongovt input | Ongoing | Opportunity to exchange information on key needs and solutions on adaptation science as part of NFWPCAS |

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| Region/State Scales | | | | | | |
| Landscape Conservation Cooperatives (LCCs) http://www.fws.gov/science/shc/lcc.html | Nation-wide network of LCCs established by DOIInterior to provide venue for regional-scale assessment and understanding of climate impacts on natural resources and foster more integrated efforts to address them across govt and nongovt partners | Each LCC determining its products and services such as: Vulnerability Assessments Needs Assessments Capacity Building | USFWS | Each LCC has a steering committee of multiple organizations | Ongoing | LCCs could provide conduit for broadbased input on key issues and solutions to address them as core part of the NFWPCAS |
| Climate Science Centers (CSCs) http://www.doi.gov/whatwedo/climate/strategy/CS-C-Map.cfm | DOIInterior is establishing network of Climate Science Centers (CSCs) to provide information and tools to support adaptation efforts of LCCs and many partners regarding natural resources (and other topics) | Key products determined by needs identified by LCCs and others | USGS | Multiple partners involved in Steering Committees for CSCs | Ongoing | Since CSCs have strong focus on impacts of climate on natural resources, they are key sources of input on priority science/decision support needs and strategies to address them for inclusion in NFWPCAS |
| National Climate Service/Regional Climate Centers (RCCs) http://www.climate.gov/#climateWatch | NOAA Climate Service is establishing nation-wide network of “regional climate centers” to provide climate products and services to broad range of users, sectors | Many products and services from climate change projections at multiple scales to assessments and capacity building | NOAA | Multiple partners involved in RCC development | Ongoing | RCCs could provide information on key needs for climate products and services and strategies to address them re: natural resources and other sectors |
| State Adaptation Plans | Many States engaged in assessment of climate impacts and development/implementation of adaptation strategies | Variety of products including vulnerability assessments and adaptation plans | States | State agencies and non-govt partners at variety of levels (differs by State) | Ongoing | These are key sources of expertise and input for the NFWPCAS regarding what is working, priority needs and recommended strategies/solutions |

Climate Change Initiatives and Strategies

(Compiled for the Pacific Northwest Tribal Climate Change Project – October 2011)

| Scale | Strategy | Inputs | Partnerships |
|--|--|--|--|
| National | National Climate Assessment; US Global Research Program | Chapter on indigenous communities; inputs from tribes into regional and sectoral chapters | NCA Tribal Technical Input Team |
| National | National Fish, Wildlife and Plants Climate Change Strategy | Tribal representation on management and steering committees; Input from tribes on ecosystem chapters | U.S. Fish and Wildlife Service National Oceanic and Atmospheric Administration New York Division of Fish, Wildlife, & Marine Resources |
| Tribal, State, Federal or Cross-Jurisdictional | Climate Change Impact Assessment and Adaptation Plans | Traditional knowledge and tribal input | Tribal elders, youth, tribal council and staff |
| | | Bio-physical data assessments and analysis | Public agencies, academic, NGOs, National Climate Science Centers |
| | | Planning, implementation monitoring | Landscape Conservation Cooperatives |
| Tribal, State, Federal or Cross-Jurisdictional | Mitigation Strategies | Greenhouse gas emission inventories and GHG reduction plans | EPA |
| | | Development /investment in renewable energy projects | US DOE Tribal Energy Program |
| | | Payments for ecosystem services (including carbon) | USDA FS Office of Ecosystem Services; |

ADAPTATION PLANNING RESOURCES:

- US Global Change Research Program Scientific Assessments: <http://www.globalchange.gov/publications/reports/scientific-assessments>
- National Fish, Wildlife and Plants Climate Adaptation Strategy: <http://www.wildlifeadaptationstrategy.gov/>
- Institute for Tribal Environmental Professionals Tribal Climate Change Adaptation Plan Template: <http://www4.nau.edu/itep/climatechange/index.asp>
- Swinomish Climate Change Initiative – Adaptation Plan: http://www.swinomish-nsn.gov/climate_change/project/reports.html
- Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments Climate Impacts Group and King County, WA, September 2007. <http://cses.washington.edu/cig/fpt/guidebook.shtml>

Examples of SECTORS IMPACTED BY CLIMATE CHANGE

| Sector | Policy and planning issues |
|--|--|
| Agriculture | <ul style="list-style-type: none"> • Food security, first foods • Impacts from temperature fluctuations, disease and weather extremes on agricultural and livestock productivity. |
| Coastal resources | <ul style="list-style-type: none"> • Sea level rise; Loss of land and sea ice |
| Ecosystems | <ul style="list-style-type: none"> • Biodiversity • Ecosystem function • Shifts in species |
| Fisheries | <ul style="list-style-type: none"> • Marine and freshwater |
| Forests and rangelands | <ul style="list-style-type: none"> • Wildfire • Insect infestation • Climate effects on vegetation |
| Renewable Energy | <ul style="list-style-type: none"> • Solar, wind, hydro, geo-thermal, biomass utilization, etc. • Investment opportunities and challenges |
| Water | <ul style="list-style-type: none"> • Changes in precipitation patterns and intensity; incidence of drought • Widespread melting of snow and ice • Increasing atmospheric water vapor, evaporation and water temperatures • Reductions in lake and river ice • Changes in soil moisture and runoff |
| Land Use | <ul style="list-style-type: none"> • Population changes (urban, rural) • Regulatory (i.e., building codes and zoning) • Non-regulatory (i.e., land acquisition, conservation programs, incentives, etc.) |
| Transportation and infrastructure | <ul style="list-style-type: none"> • Relocation issues <p>Roads and bridges, disruption of transportation, communication and utilities</p> |
| Public Health | Water quality and quantity, temperature fluctuation, air quality and respiratory diseases, disease vectors |
| Emergency Management and Natural Hazards | Wildfire, drought, floods, and other natural disasters; evacuation and relocation |
| Economy | Increased costs (energy, food, infrastructure); impacts to businesses, jobs |