Resource Name	Description	URL
	DATA TOOLS	1.11.11
Generalized Likelihood Uncertainty Estimation (GLUE)	The GLUE package provides tools for sensitivity analysis and uncertainty estimation using the results of Monte Carlo simulations.	http://www.es.lancs.ac.uk/hfdg/freeware/hfdg_freeware glue.htm
(GLOL)	This model was developed for predictions across the interior Columbia River basin in	re gide.htm
	the Pacific Northwest. The model predicts the distribution of thermally suitable	http://www.fs.fed.us/rm/boise/AWAE/projects/stream
Thermal Stream Habitat Model	habitat for bull trout by incorporating air temperature, elevation, latitude, and	temp/airtemp/airtemp model.shtml
	longitude.	
	This modeling approach uses thermograph records and a simple set of geomorphic	
Multiple Regression Stream Temperature Model	predictor variables derived from digital elevation models (DEM). A multiple regression	http://www.fs.fed.us/rm/boise/AWAE/projects/stream
	model and GIS are used to predict stream temperatures for individual reaches	temp/multregression/multregression model.shtml
	throughout a river network. The Climate Wizard enables you to: 1) view historic temperature and rainfall maps for	
	anywhere in the world; 2) view state-of-the-art future predictions of temperature and	
Climate Wizard	rainfall around the world; 3) view and download climate change maps in a few easy	http://www.climatewizard.org/
	steps	
	The Data Basin Aquatic Conservation Center centralizes datasets and findings related	
Data Basin - Aquatic Conservation Center	to aquatic ecosystems. Tools are provided to visualize, analyze, and communicate	http://databasin.org/aquatic-center
	about vulnerabilities, trends or predicted future scenarios at local and regional scales.	
	The Climate Center is a component of Data Basin that specializes in creating and	
	disseminating critical datasets, tools, and networks needed to address changes related	
Data Basin - Climate Center	to climate. The Data Basin Climate Center allows you to publish existing climate	http://databasin.org/climate-center
	datasets and analyses, review new research on the potential patterns and impacts of a	
	changing climate, and connect with people with datasets, expertise, or similar interests	
	The joint CCI/CLIVAR/JCOMM Expert Team (ET) on Climate Change Detection and	
	Indices (ETCCDI) has a mandate to address the need for the objective measurement	
Climate Change Indices	and characterization of climate variability and change by providing international	http://cccma.seos.uvic.ca/etccdi/index.shtml
-	coordination and helping organizing collaboration on climate change detection and	
	indices relevant to climate change detection, and by encouraging the comparison of modeled data and observations.	
ClimatePrediction.net Weather at Home	This site contains raw data from dynamical downscaling. It's aimed at scientists rather	
Experiment (Western US Region)	than the general public, though anyone is welcome to view the data.	https://results.cpdn.org/repository/search_regional
	Briefly, IWR Planning Suite assists with plan formulation by combining user-defined	
UA/D Diamaina Coita Cont Effortion	solutions to planning problems and calculating the effects of each combination, or	http://www.angl.ang/iwanlan/Caftwarelafe 1 0 11 0
IWR Planning Suite - Cost Effectiveness, Incremental Cost Analysis	"plan." The program can assist with plan comparison by conducting cost effectiveness	http://www.pmcl.com/iwrplan/SoftwareInfo 1 0 11 0
incremental cost Analysis	and incremental cost analyses, identifying the plans which are best financial	<u>.asp</u>
	investments and displaying the effects of each on a range of decision variables.	
University of Washington's B2Variable Infiltration		http://www.hydro.washington.edu/Lettenmaier/Model
Capacity Model (VIC)	VIC is a macroscale hydrologic model that solves full water and energy balances.	s/VIC/index.shtml
	Allocation of limited water resources between agricultural, municipal and	
Water Evaluation and Planning (WEAP)	environmental uses now requires the full integration of supply, demand, water quality and ecological considerations. The Water Evaluation and Planning system, or WEAP,	http://www.weap21.org/
water Evaluation and Flamming (WEAF)	aims to incorporate these issues into a practical yet robust tool for integrated water	http://www.weapz1.org/
	resources planning.	
	LEAP is an integrated modeling tool that can be used to track energy consumption,	
	production and resource extraction in all sectors of an economy. It can be used to	
Long-range Energy Alternatives Planning System	account for both energy sector and non-energy sector greenhouse gas (GHG) emission	http://www.energycommunity.org/default.asp?action=
(LEAP)	sources and sinks. In addition to tracking GHGs, LEAP can also be used to analyze	<u>47</u>
	emissions of local and regional air pollutants, making it well-suited to studies of the	
	climate co-benefits of local air pollution reduction.	
CMUDE CCM data	Data from GCM runs for IPCC AR5. Earth System Grid gateway hosted by the Program	http://psmdi3.llpl.gov/osgsat/homo.htm
CMIP5 GCM data	for Climate Model Diagnosis and Intercomparison (PCMDI). Note that CMIP5 (Climate Model Intercomparison Project) is next generation after CMIP3.	http://pcmais.iim.gov/esgcet/nome.ntm
	This is a suite of tools designed at PCMDI for the analysis and display of GCM climate	
Climate Data Analysis Tools	data.	http://www2-pcmdi.llnl.gov/cdat
	This online tool, from the Office of the Washington State Climatologist, allows the user	
Trend Analysis	to analyze temperature, precipitation and snow water equivalent data for the pacific	http://www.climate.washington.edu/trendanalysis/
	northwest. Focus is on the PNW.	
	This site walks the user through various excel functions that could be used for	http://processtrends.com/toc trend analysis with exc
Trend Analysis with Excel	analyzing data trends. Examples show climate variables but hydrological variables	el.htm#Excel Regression Tools
Piac corrected and downsorled CMIR2 (IDCC ARA)	could be substituted by the user.	http://gdo
climate projections.	The archive was developed to provide planning analysts access to climate projections spatially downscaled to a finer spatial resolution (1/8 deg or ~12x12km).	http://gdo- dcp.ucllnl.org/downscaled cmip3 projections/
cimate projections.	Downscaled and debiased, global, 21st-century climate scenarios from Conservation	acplacimiliorgy downscaled_cittips_projections/
	International to accommodate the immediate demand for multiple, fine resolution	the Mark the second second
Globally downscaled climate projections	climate projections and enable and enhance efforts implement adaptation and	http://futureclimates.conservation.org/
	mitigation measures in response to climate change. Spatial resolution is ~4km.	
Climate Scenarios for the conterminous United	These data were developed from climate scenarios used in the Fourth Assessment of	
States at the county spatial scale using SRES	the Intergovernmental Panel on Climate Change, specifically the A1B and the A2 SRES	http://www.fs.fed.us/rm/data_archive/dataaccess/US
scenarios A1B and A2 and PRISM climatology	(Special Report on Emissions Scenarios) scenarios as modeled by these climate models: CGCM, CSIRO, and MIROC. The monthly change factors were developed from global	ClimatesCenarios county A1B A2 PRISM.shtml
	model output and downscaled to the 5 arc minute (~8 km) spatial grid using ANUSPLIN.	
	Dasparana domissanca to the o are minute (o kin) spatial grid using ANOSPLIN.	

Climate Scenarios for the conterminous United States at the county spatial scale using SRES scenarios B2 and PRISM climatology	These data were developed from the SRES (Special Report on Emissions Scenarios) scenario B2 used in the Third Assessment of the Intergovernmental Panel on Climate Change, specifically as modeled by these climate models: GCGM2 (Climate Centre for Modelling and Analysis), CSIRO MK2 (Australia's Commonwealth Scientific and Industrial Research Organisation), and HadCM3 (Hadley Centre for Climate Prediction and Research UK). The monthly change factors were developed from global model output and downscaled to the 5 arc minute (*8 km) spatial grid using ANUSPLIN fellowing the unstable figure at al. (2004).	http://www.fs.fed.us/rm/data_archive/dataaccess/US_ClimateScenarios_county_B2_PRISM.shtml
Climate Scenarios for the conterminous United States at the 5 arc minute grid spatial scale using SRES scenarios A1B and A2 and PRISM climatology	following the work of Price et al. (2004). These data were developed from climate scenarios used in the Fourth Assessment of the Intergovernmental Panel on Climate Change, specifically the A1B and the A2 SRES (Special Report on Emissions Scenarios) scenarios as modeled by these climate models: CGCM, CSIRO, and MIROC. The monthly change factors were developed from global model output and downscaled to the 5 arc minute spatial grid using ANUSPLIN.	http://www.fs.fed.us/rm/data archive/dataaccess/US ClimateScenarios grid A1B A2 PRISM.shtml
Climate Scenarios for the conterminous United States at the 5 arc minute grid spatial scale using SRES scenarios B2 and PRISM climatology	These data were developed from the SRES (Special Report on Emissions Scenarios) climate scenario B2 used in the Third Assessment of the Intergovernmental Panel on Climate Change, as modeled by these climate models: GCGM2 (Climate Centre for Modelling and Analysis), CSIRO MK2 (Australia's Commonwealth Scientific and Industrial Research Organisation), and HadCM3 (Hadley Centre for Climate Prediction and Research UK). The monthly change factors were developed from global model output and downscaled to the 5 arc minute spatial grid using ANUSPLIN following the work of Price et al. (2004)	http://www.fs.fed.us/rm/data_archive/dataaccess/US_ClimateScenarios_grid_B2_PRISM.shtml
Benefit-Cost Analysis	FEMA has developed Benefit-Cost Analysis (BCA) software to facilitate the process of preparing a BCA. Using FEMA-approved BCA software will ensure that the calculations are prepared in accordance with OMB Circular A-94, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs and FEMA's standardized methodologies.	http://www.fema.gov/government/grant/bca.shtm
Habitat Priority Planner	This tool aids in making decisions about habitat conservation, restoration, and land use planning. The program allows users to easily test various ideas and "what if" scenarios on the fly, making it the perfect tool to use in a group setting.	http://www.csc.noaa.gov/digitalcoast/tools/hpp/index.html
Coastal County Snapshot	The Coastal County Snapshots tool provides local officials with a quick look at a county's demographics, infrastructure, and environment within the flood zone. A map and pull-down menus let users pick the county of interest, and a report is provided for download that can be saved or printed.	http://www.csc.noaa.gov/digitalcoast/tools/snapshots/
Statistics of Weather and Climate Extremes	The Extremes Toolkit is an interactive program for analyzing extreme value data using the R statistical programming language. A graphical user interface is provided, so a knowledge of R is not necessarily required. The toolkit comes with a tutorial that explains how the toolkit can be used to treat weather and climate extremes in a	http://www.assessment.ucar.edu/toolkit/
Regional Hydro-Ecologic Simulation System (RHESSys)	realistic manner. RHESSys is a GIS-based, hydro-ecological modeling framework designed to simulate carbon, water and nutrient fluxes. RHESSys combines both a set of physically based process models and a methodology for partitioning and parameterizing the landscape. Planners, resource managers, scientists, and conservationists can use NatureServe	http://fiesta.bren.ucsb.edu/~rhessys/setup/downloads/downloads.html
NatureServe Vista: Decision support for better planning	Vista to: conduct conservation planning and assessments; integrate conservation values with other planning and assessment; activities, such as land use, transportation, energy, natural resource, and ecosystem-based management; evaluate, create, implement, and monitor land use and resource management scenarios designed to achieve conservation goals within existing economic, social, and political contexts.	http://www.natureserve.org/prodServices/vista/overview.jsp
Nonpoint-Source Pollution and Erosion Comparison Tool (N-SPECT)	Use the Nonpoint-Source Pollution and Erosion Comparison Tool (N-SPECT) to investigate potential water quality impacts from development, other land uses, and climate change.	http://www.csc.noaa.gov/digitalcoast/tools/nspect/
Visualizing California climate data on a grid	This prototype webpage contains climate scenarios (temperature and precipitation data) for multiple cells in California as estimated monthly average conditions from the present to the rest of this century.	http://www.climatechange.ca.gov/visualization/grid.html
Water to Air models	To give water managers a better understanding of the relationship between water management decisions, energy consumption, and air quality the Pacific Institute has created two Water to Air Models. One model is for urban water districts and the other for agricultural districts.	http://www.pacinst.org/resources/water to air model s/index.htm
MODSIM-DSS	MODSIM-DSS is a generic river basin management decision support system for developing basin-wide strategies for shortterm water management, long-term operational planning, and drought/climate change contingency planning.	http://modsim.engr.colostate.edu/index.shtml
IRI Historical Variability Analysis Tool	This tool allows a user to investigate the historical variability of precipitation and temperature at various time scales (interannual, decadal, and long-term linear trend) over the 20th century near a user-selected location	http://iridl.ldeo.columbia.edu/maproom/.Global/.Wor ld_Bank/.Climate_Variability/
NCDC State of Climate Reports	The State of the Climate Report is a collection of monthly summaries recapping climate related occurrences on both a global and national scale.	http://www.ncdc.noaa.gov/sotc/
CIG Climate Change Scenarios for the Pacific Northwest	The Climate Impacts Group (CIG) recently examined a select subset of global simulation models from the Intergovernmental Panel on Climate Change Assessment Report 4 (IPCC AR4), driven by two greenhouse gas emissions scenarios (B1 and A1B), and produced updated scenarios of future climate for the PNW.	http://cses.washington.edu/cig/fpt/ccscenarios.shtm
CIG Hydrologic Climate Change Scenarios for the Pacific Northwest Columbia River Basin and Coastal Drainages	The Climate Impacts Group (CIG) worked with several prominent water management agencies in the Pacific Northwest to develop hydrologic climate change scenarios for approximately 300 streamflow locations in the Columbia River basin and selected coastal drainages west of the Cascades.	http://www.hydro.washington.edu/2860/
CIG 20th and 21st century climate projections based on subset of IPCC AR4 models	Data and graphs in excel spreadsheet showing annual and seasonal projections for temperature and precipitation. Projections are from a subset of Intergovernmental Panel on Climate Change Assessment Report 4 (IPCC AR4) global climate models.	http://cses.washington.edu/cig/fpt/08scensumdata.shtml

EPA BASINS: Better Assessment Science Integrating Point and Non-point Sources	The National Water Program (EPA) recently developed a climate assessment tool within the BASINS decision support system (BASINS CAT). BASINS CAT provides a capability to create climate change scenarios to assess the sensitivity of hydrologic and water quality endpoints to climate change using the BASINS HSPF watershed model.	http://water.epa.gov/scitech/datait/models/basins/BAS INS4_index.cfm
GANTT Project	GanttProject is a cross-platform desktop tool for project scheduling and management. It runs on Windows, Linux and MacOSX, it is free and its code is opensource. It can 1) create work breakdown structure, draw dependencies, define milestones; 2) assign human resources to work on tasks, see their allocation on the Resource Load chart; 3) save charts as PNG images, generate PDF and HTML reports; 4) import projects from and export them to Microsoft Project formats. Export to spreadsheets with CSV; and 5) share projects with your colleagues using WebDAV	http://www.ganttproject.biz/
XMind - Collaborative Minds	XMind is an open source brainstorming and mind mapping software tool. The program is intended to assist users in capturing ideas, organizing various charts, and share them with collaboration. It supports mind maps, Ishikawa diagrams (also called fishbone diagrams or cause-and-effect diagrams), tree diagrams, organization charts, and spreadsheets. It can be used for knowledge management, meeting minutes, task management, and GTD.	http://www.xmind.net/
	GUIDE TOOLS The Adaptation Winard will help you to access your examination's youlgarability to	
UKCIP's Adaptation Wizard	The Adaptation Wizard will help you to assess your organisation's vulnerability to current climate and future climate change, identify options to address your organisation's key climate risks, and help you develop and implement a climate change adaptation strategy	http://www.ukcip.org.uk/wizard/
Guidelines for use of climate scenarios developed from statistical downscaling methods	These guidelines were developed as supporting material for the IPCC in 2004. It reviews statistical downscaling methods and describes when it is/is not appropriate to use statistically downscaled data. This guide was developed by the Water Utilities Climate Alliance (WUCA). It outlines	http://www.ipcc-data.org/guidelines/dgm_no2_v1_09_2004.pdf
Decision Support Planning Methods: Incorporating Climate Change Uncertainties into Water Planning	This guide was everloped by the water of interestinate Aniance (WoCA). It of the decision making approaches, including Classic Decision Analysis, Traditional Scenario Planning, Robust Decision Making, Real Options and Portfolio Planning. Case studies are also provided.	http://www.wucaonline.org/assets/pdf/actions whitep aper 012110.pdf
Options for Improving Climate Modelling to Assist Water Utility Planning for Climate Change	This guide was developed by the Water Utilities Climate Alliance (WUCA). It provides examples of how water utilities have analyzed climate change impacts on water resources, as well as a thorough and up-to-date description of the science of climate modelling.	http://www.wucaonline.org/assets/pdf/actions_whitepaper_120909.pdf
EPA's Tabletop Exercise Tool for Water Systems: Emergency Preparedness, Response and Climate Resiliency	The updated TTX Tool contains fifteen scenarios that address an all-hazards approach to emergency preparedness and response, including natural hazards and manmade incidents, as well as introduces users to the potential impacts of climate change on the Water Sector. LCIP is part of UKCIP's toolbox. The LCLIP process highlights a locality's current	http://yosemite.epa.gov/ow/SReg.nsf/description/TTX Tool
Local Climate Impacts Profile (LCLIP)	vulnerability to severe weather events and how these events affect local communities as well as local authority assets, infrastructure and capacity to deliver services. Understanding current vulnerability can be considered a robust starting point for the preparation of an adaptation strategy.	http://www.ukcip.org.uk/lclip/
Costings	Costings is part of UKCIP's toolbox. Costing the impacts of climate change is a methodology for calculating the costs of climate impacts and describes how to compare these to the costs of adaptation measures.	http://www.ukcip.org.uk/costings/
Preparing for Climate Change: A Guidebook for Local, Regional and State Governments	This guidebook was prepared for ICLEI's climate resilient community program. Its purpose is to help you as a decision-maker in a local, regional, or state government prepare for climate change by recommending a detailed, easy-to-understand process for climate change preparedness based on familiar resources and tools. This guide represents a summary of a workshop, held in 2010, to "examine the	http://www.iclei.org/fileadmin/user_upload/document s/Global/Progams/CCP/Adaptation/ICLEI-Guidebook- Adaptation.pdf
Exploration of Tolerable Risk Guidelines (TRG) for the USACE Levee Safety Program	concepts and principles of tolerability of risk and tolerable risk guidelines (TRG) and to explore their application to, and use in, managing lifesafety, economic, and environmental risk associated with levee systems." TRG is a tool that can to be used to explain and characterize (risk communication) the significance of risk estimates, and it may be used to prioritize among options and to evaluate their urgency for action (risk management).	http://www.iwr.usace.army.mil/docs/iwrreports/10-R-8.pdf
Benefit-Cost Review	The purpose of this guide is to help local jurisdictions understand how to apply the concepts of Benefit-Cost Review to the prioritization of mitigation actions. B-CR involves a thorough and comprehensive treatment of potential benefits and costs, both monetary and non-monetary. It is generally a pre-cursor for BCA.	http://www.fema.gov/library/viewRecord.do?id=2680
Climate Literacy: The Essential Principles of Climate Sciences	The Essential Principles of Climate Science" presents important information for individuals and communities to understand Earth's climate, impacts of climate change, and approaches for adapting and mitigating change.	
A Guide to Soliciting Expert Input	This guide is provided to assist project managers/working group leaders in obtaining and compiling much of the information that a NatureServe Vista project requires. CREAT allows users to evaluate potential impacts of climate change on their utility and	see last bullet at http://www.natureserve.org/prodServices/vista/othe rTools.jsp
EPA's Climate Resilience Evaluation & Awareness (CREAT)	to evaluate adaptation options to address these impacts or climate change of their utility and to evaluate adaptation options to address these impacts using both traditional risk assessment and scenario-based decision making. The tool guides users through identifying threats based on regional differences in climate change projections and designing adaptation plans based on the types of threats being considered. Following assessment, CREAT provides a series of risk reduction and cost reports that will allow the user to evaluate various adaptation options as part of long-term planning.	http://water.epa.gov/infrastructure/watersecurity/climate/creat.cfm
ADAPT	ADAPT allows users to input data to assess their community's vulnerabilities, choose preparedness goals, and develop and prioritize actions. Need to become an ICLEI member.	http://www.icleiusa.org/programs/climate/Climate Adaptation/adaptation-database-and-planning-tool-adapt
	INFORMATION TOOLS	

This report summarizes the observed and projected effects of climate on the Water, climate change, and forests: watershed http://www.treesearch.fs.fed.us/pubs/35295 hydrological cycle and forested watersheds. It also outlines adaptive response to stewardship for a changing climate change that would help to ensure healthy, resilient watersheds. The Background Science Section has basic information about climate science, climate ClimatePrediction.net -- Climate Science http://climateprediction.net/content/climate-science-Explained modelling, and regional climate modelling. explained US ACE Institute for Water Resources -- Shared http://www.sharedvisionplanning.us/resTipsGenericalt. Vision Planning - Standard List of Generic cfm List of adaptation options for water managers. Alternatives This document is the user guide to the Army Corp's MCDA module. The Corps currently uses a decision model, IWR-Plan, a tool developed by the US Army Institute for Water Resources. IWR-Plan is limited in its capacity to compare plans effectively IWR Planning Suite - User Guide Multicriteria because it can only evaluate one type of benefit to produce the incremental cost http://www.pmcl.com/iwrplan/MCDAUsersGuideSep10 **Decision Analysis Module** analysis. An additional module to the IWR-Plan suite includes Multi Criteria Decision Analysis (MCDA) Module and was developed to provide Corps planners with a toolbox for conducting multi criteria decision analysis and exploring multiple dimensions of a planning decision. NOTE: users must register to download software. **Evaluating Sustainability of Projected Water** The analysis provides a national-scale evaluation of the results of changing water http://www.nrdc.org/globalWarming/watersustainabilit Demands in 2050 Under Climate Change demand and supply, and helps identify regions that are most susceptible to climate Scenarios US Climate Change Science Program Synthesis This report describes climate models referenced in the 4th Assessment Report by the http://www.climatescience.gov/Library/sap/sap3-Intergovernmental Panel on Climate Change (IPCC) and their ability to simulate and Assessment Product 3.1: Climate Models An 1/final-report/default.htm Assessment of Strengths and Limitations climate. This chapter assesses the capacity of the global climate models used elsewhere in this IPCC AR4 WG1 The Physical Science Basis: report for projecting future climate change. Confidence in model estimates of future http://www.ipcc.ch/publications_and_data/ar4/wg1/ Climate Models and their evaluation (Chap 8) climate evolution has been enhanced via a range of advances since the IPCC Third en/ch8.html Assessment Report (TAR). Regional climate change projections presented here are assessed drawing on IPCC AR4 WG1 The Physical Science Basis: information from four potential sources: AOGCM simulations; downscaling of AOGCM- http://www.ipcc.ch/publications and data/ar4/wg1/ Regional Climate Projections, North America simulated data using techniques to enhance regional detail; physical understanding of <u>en/ch11.html</u> (Chap 11) the processes governing regional responses; and recent historical climate change The California Water Plan provides a framework for water managers, legislators, and the public to consider options and make decisions regarding California's water future. The Plan, which is updated every five years, presents basic data and information on California's water resources including water supply evaluations and assessments of California (DWR) Water Plan agricultural, urban, and environmental water uses to quantify the gap between water supplies and uses. The Plan also identifies and evaluates existing and proposed statewide demand management and water supply augmentation programs and projects to address the State's water needs. http://www.waterplan.water.ca.gov/technical/waterp California (DWR) Water Code This site contains legislation related to the California Water Plan. The Statewide Analysis Network (SWAN) is an effort coordinated by the California Department of Water Resources to facilitate the collaborative use of data, information California (DWR) Statewide Water Analysis and analytical tools for integrated water management. Current (5.11) activities include http://www.waterplan.water.ca.gov/swan/index.cfm Network efforts to generate future climate change scenarios for the 2013 California Water Plan This guidance discusses key issues that should be considered when making the transition from awareness to action. It is aimed at anyone undertaking a climate http://www.ukcip.org.uk/essentials/adaptation/mana UKCIP guidance for Stages 1&2 change risk based assessment as part of an adaptation work program and emphasises ging-adaptation/ the importance of the scoping phase. This resource describes 27+ resource management strategies that can help meet various (California) Water Plan objectives. Regional managers can mix and match Water Management Strategies for the California http://www.waterplan.water.ca.gov/cwpu2009/index strategies into response packages, crafting them to provide multiple water and Water Plan .cfm#volume2 resource benefits, diversify their water portfolio, and become more regionally selfsufficient. TRAINING TOOLS see module: Climate change fitting the pieces together. this is a basic level lecture on COMET/MetEd Training modules - Climate http://www.meted.ucar.edu/topics_climate.php climate and climate change. (Others modules on this page may also be helpful.) Basic, intermediate and advanced level training in hydrology. Several modules could COMET/MetEd Training modules - Hydrology http://www.meted.ucar.edu/topics hydro.php The distance learning curriculum utilizes e-learning technology to clarify graphs and concepts from the 2007 Intergovernmental Panel on Climate Change Summary for http://cimss.ssec.wisc.edu/climatechange/ NASA/CIMESS Climate Literacy Ambassadors Policy Makers with content intricately linked to the Essential Principles of Climate Literacy. The Regional Climate Change unit might be particularly useful here. The University of Queensland's Creating climate This short course is aimed at planning practitioners engaged in policy development and adaptable settlements: Building resilience decision-making at all levels of government and to those who will be working within http://ccas.gpem.uq.edu.au/ through adaptive planning these frameworks. http://www.icleiusa.org/programs/climate/Climate Ad **ICLEI Climate Adaptation Training Series** COMING SOON to ICLEI aptation/climate-adaptation-trainings This University of Arizona site presents the essential steps in building scenarios and http://ag.arizona.edu/futures/tou/tut2-**Building Scenarios** reviews options for simple or complex scenario building. buildscenarios.html While the workshop lays a foundation in science, it primarily focuses on actions that can be taken to prepare and adapt to the anticipated impacts of climate change. A "Planning for Climate Change" Workshop foundational component of this workshop was the authoritative guidebook "Preparing http://www.nerrs.noaa.gov/CTPIndex.aspx?ID=455 for Climate Change: A Guidebook for Local, Regional, and State Governments," coauthored by two of the original instructors of this workshop. NOAA Coastal Services has developed an online self-guided course which introduces coastal management professionals to needs assessments and how to conduct one. By http://www.csc.noaa.gov/training/needs-Conducting Needs Assessments systematically assessing target audience needs, coastal programs can determine a assessment.html focus and direction and make better-informed decisions about program or project

objectives.