# Template for Assessing Climate Change Impacts and Management Options



A USDA Forest Service Partnership Southern Global Change Program :: Southern Region Planning www.forestthreats.org/taccimo

#### **Overview**

- The Template for Assessing Climate Change Impacts and Management Options (TACCIMO) is a web-based tool that substantively connects (1) planning and (2) science through a (3) report generation service.
- TACCIMO provides land owners, managers, and planners with the most current climate change science available.
- The primary function is to facilitate the review of climate change forecasts, factors impacting ecosystems, management options, and create an optional report to aid planning and management.

1. Planning Management conditions and capabilities to address climate change

2. Science Physical and biological impacts of climate change and potential management options

# 3. TACCIMO Report

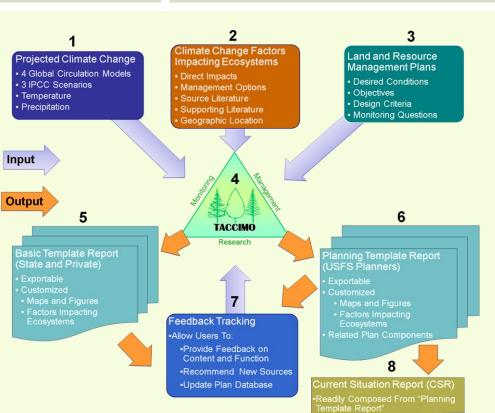
Customized and synthesized account of science and related planning

#### **Report Generation**

- Exportable report containing climate change projections, direct impacts, and management options
- Climate change projections will include maps, model projections, and figures generated from user defined selections
- Prioritized threats and management options will be reported as literature quotations (with citation)
- Forest Service planners can include forest plan components linked to climate change impacts and management options

# **TACCIMO Inputs & Outputs**

- The TACCIMO inputs are projected climate change (1), literature review derived impacts and management options (2), and USFS land and resource management plans (3).
- The web-based interface (4) uses a relational database to synthesize inputs based on user selections to generate reports (see back for further detail).
- USFS forest planners will be able to readily construct a Current Situation Report (8) from the Planning Template Report (6), a necessary component of the Land and Resource Management Plan revision process.
- State and private users will focus mainly on forecasts and impacts (5). Feedback tracking will ensure completeness of information and usefulness of functionalities (7).



#### Contact: Steve McNulty smcnulty@fs.fed.us Emrys Treasure etreasure@fs.fed.us

#### **Product Development**

- Interface used to evaluate climate change factors impacting ecosystems, management options, and links to forest planning
- TACCIMO Version 1.0 available in 2010

## Web Development

- S Objective: a web based information interface
- Text reporting and geospatial functionality
- Linkages to online models
- Interactive user experience
- (\$) Website creates an exportable report
- Platform tracks user feedback

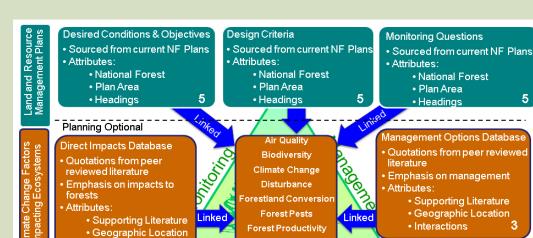
#### **Database Development**

- Comprehensive and easily updated database containing science based climate change impacts and management options
- Database of USFS land and resource management plan components to provide current condition and management capability context

#### **Connecting With Users**

TACCIMO is developed with engaged customers: (1) USFS planners and forest managers, (2) state and private partners, and (3) other parties interested in climate change as it relates to forest management

- (\$) The User Interface (6) will guide users through the TACCIMO report generation process.
- 🚯 The process will begin with selecting factors impacting ecosystems (1) relevant to management focus.
- An interactions matrix will ensure that related factors will not be missed.
- S Users will identify relevant *direct* impacts (2) and management options (3) through geographic and subject matter filters. Content can be prioritizes based on multiple criteria (i.e., scope, severity, management opportunity, etc.).
- (\$) Next, users will explore geospatial content (4) and produce standard and custom maps, figures and tables.
- (\$) Finally, a report (7) can be generated to document selections, including supporting guidance from climate change experts.



Precipitation Variability

Recreation

Femperature Variability

Wildfire

Research

1

Linked

Output

5

4

6

Projected Climate Change

Geospatia

•3 IPCC Scenarios

Interactive Tools

•4 GCMs

# **Examples of TACCIMO Web Interface & Report**

Text Based

Interactions

Interfaces

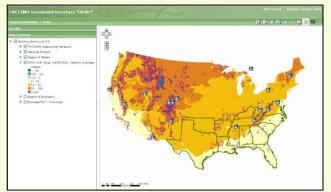
User

2

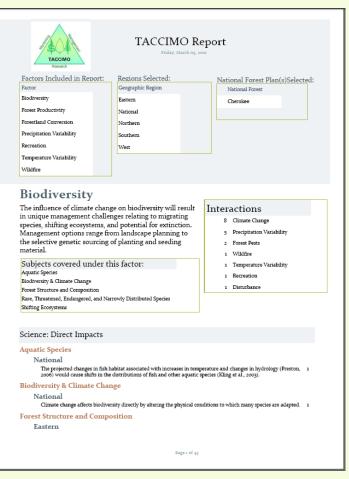
6



Screen capture of TACCIMO text Web application.



Screen capture of TACCIMO geospatial Web interface.



#### First page of example TACCIMO Report.

# **TACCIMO Parts and Process in Detail**