

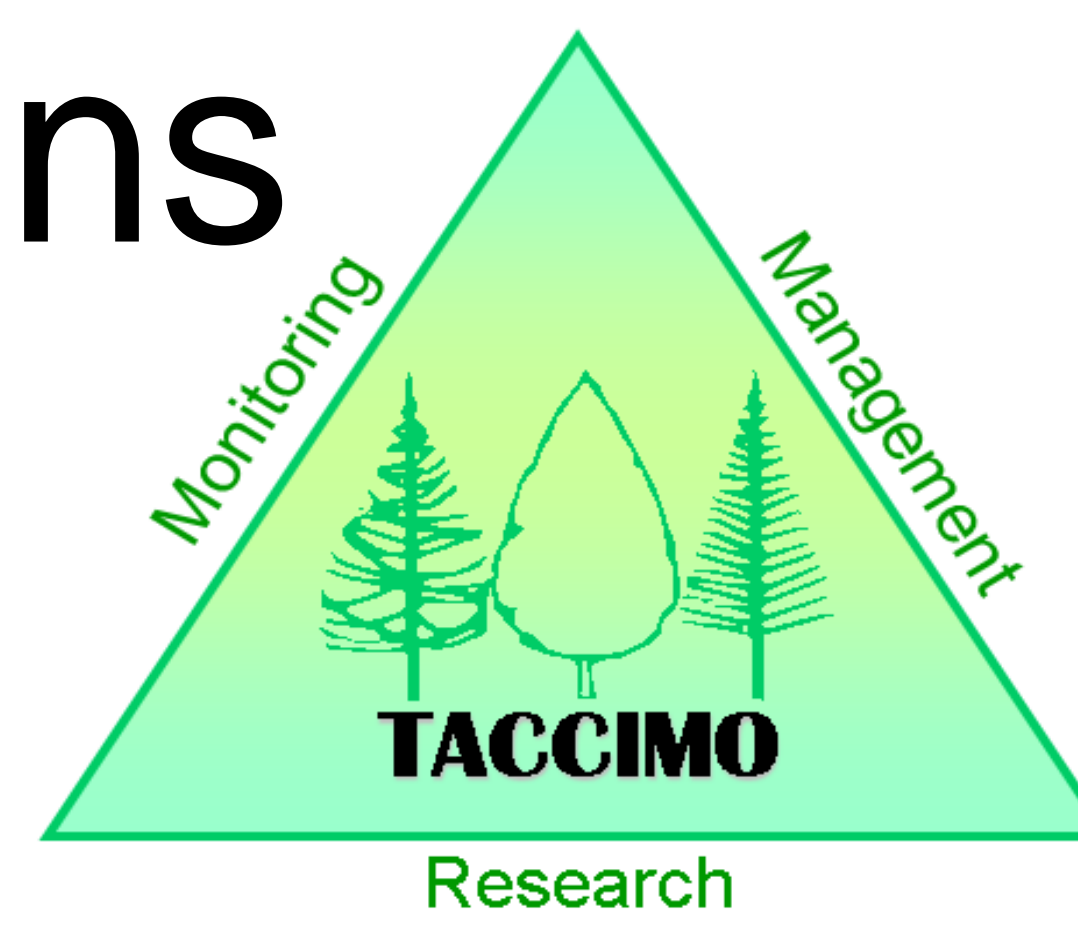
Template for Assessing Climate Change Impacts and Management Options



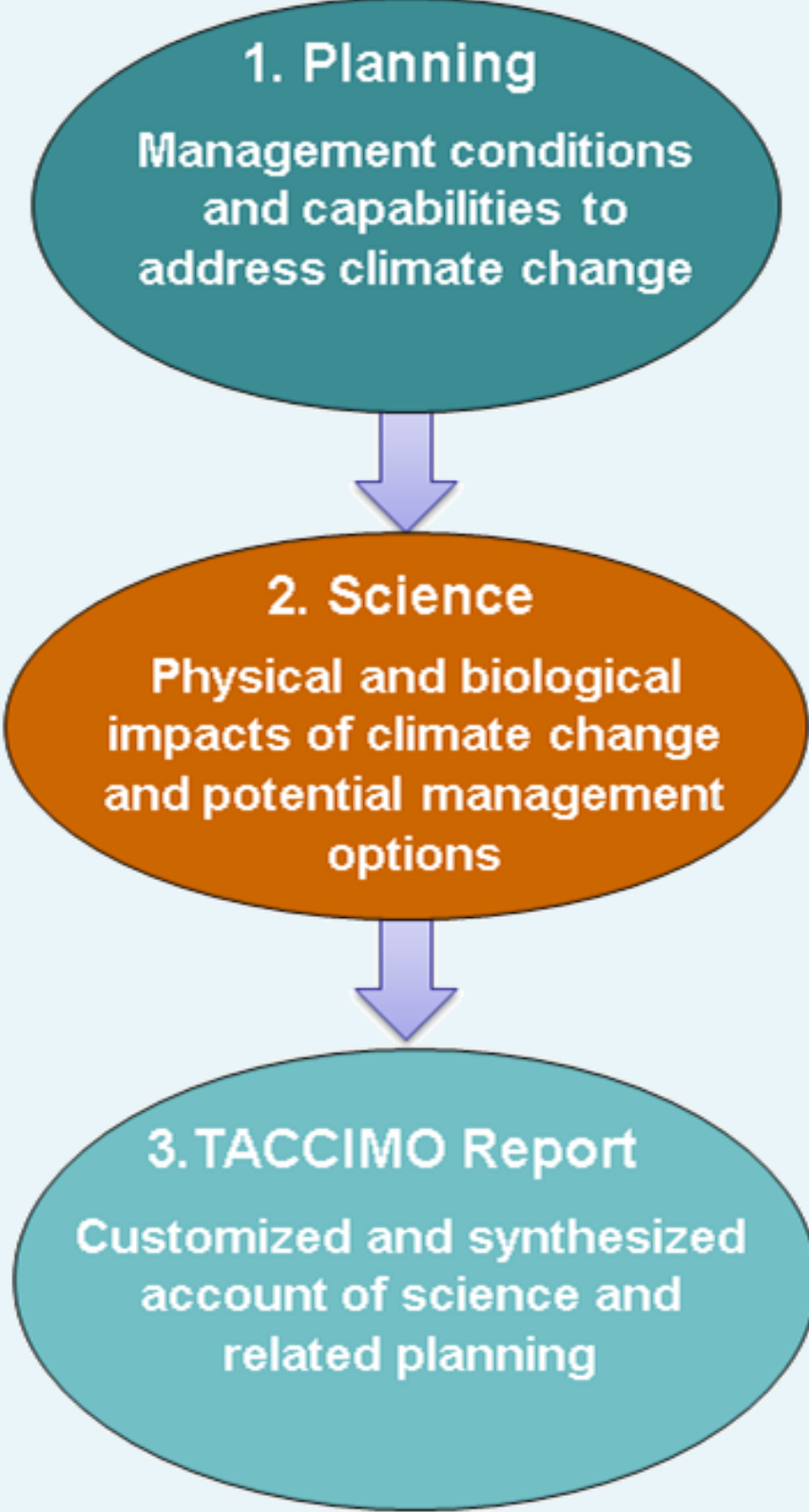
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TACCIMO
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Overview
 The Template for Assessing Climate Change Impacts and Management Options (TACCIMO) is a web-based tool that substantively connects planning and science through a report generation service.



Objectives

- Provide land owners, managers, and planners with the best and most current climate change science available
- Facilitate the review of forecasts, factors impacting ecosystems, and management options
- Create custom reports to aid in planning and management analysis

Rationale

- Inform adaptation, mitigation, and conservation activities
- Address new information and research on climate change
- Promote systemic, interactive dialogue between scientists and land managers

Product Description

- TACCIMO is an information interface used to evaluate climate change factors impacting ecosystems, management options, and links to forest planning
- TACCIMO Version 1.0 is now available to the public

Web Application

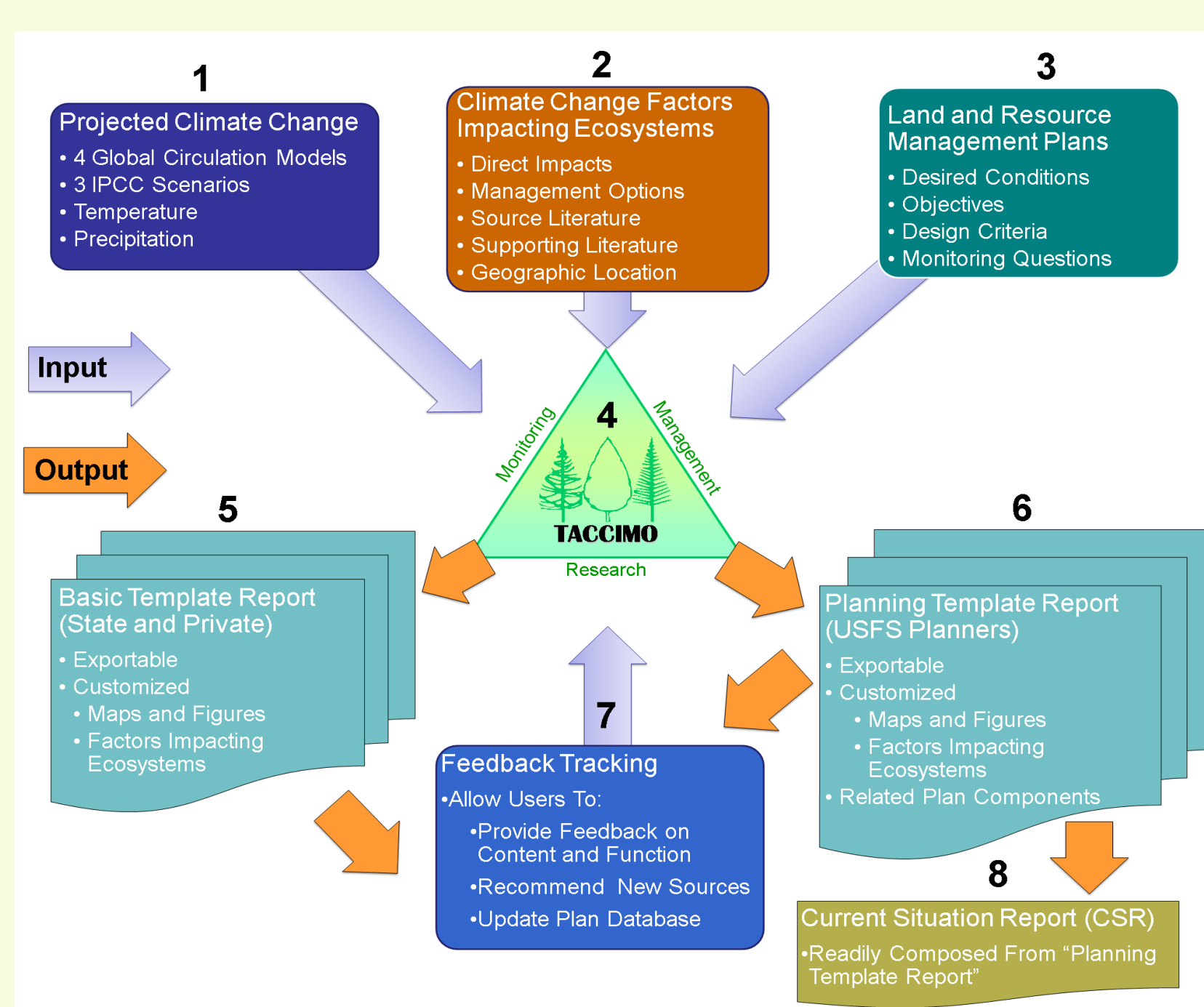
- User-friendly web based information interface
- Text and geospatial report generation functionality
- Linkages to online models (forest productivity, water availability)
- Interactive user experience with "wizard" guidance options

Database Resource

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

TACCIMO Inputs and Outputs

- TACCIMO's inputs are (1) projected climate change, (2) literature review derived impacts and management options, and (3) USFS land and resource management plans
- Its web-based interface (4) uses a relational database environment to synthesize inputs based on user selections to generate a report
- USFS forest planners can readily construct a Current Situation Report (8) from the Planning Template Report (6), while state users focus mainly on forecasts and impacts (5)
- Feedback tracking ensures completeness of information and usefulness of functionalities (7)

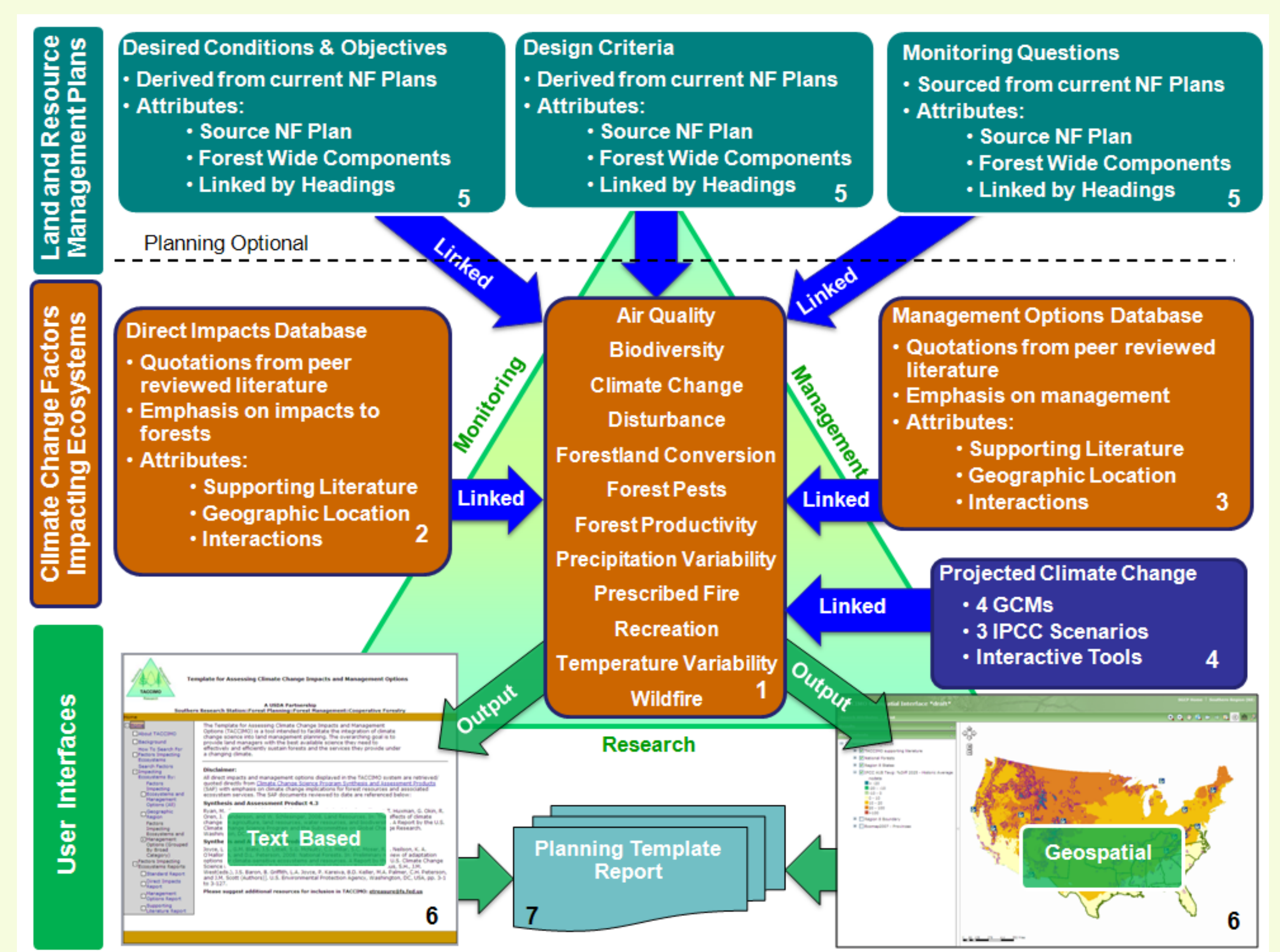


TACCIMO Tool

- Concise, credible, and current information resource
- Interactive mapping tool
- User guide contains detailed info on using the tool and interpreting results, along with case studies
- Durable connection with climate change experts

TACCIMO Process

- The user interface (6) guides the report generation process
- User starts by selecting factors impacting ecosystems (1) that are relevant to management focus
- An interactions matrix ensures that related factors will not be missed
- Identification of relevant direct impacts (2) and management options (3) is performed through geographic and subject matter filters



- Geospatial climate forecasts (4) are used to produce maps, figures, and tables
- An exportable final report (7) documents content selections, including interpretation guidance

Land and Resource Management Plans

Database that enables direct comparison of science and management

Relevant plan components include:

- Desired Conditions
- Objectives
- Design Criteria
- Monitoring Questions



Climate Change Factors Impacting Ecosystems

Easily updatable database derived from synthesis assessments and other scientific peer-reviewed literature

Content areas include:

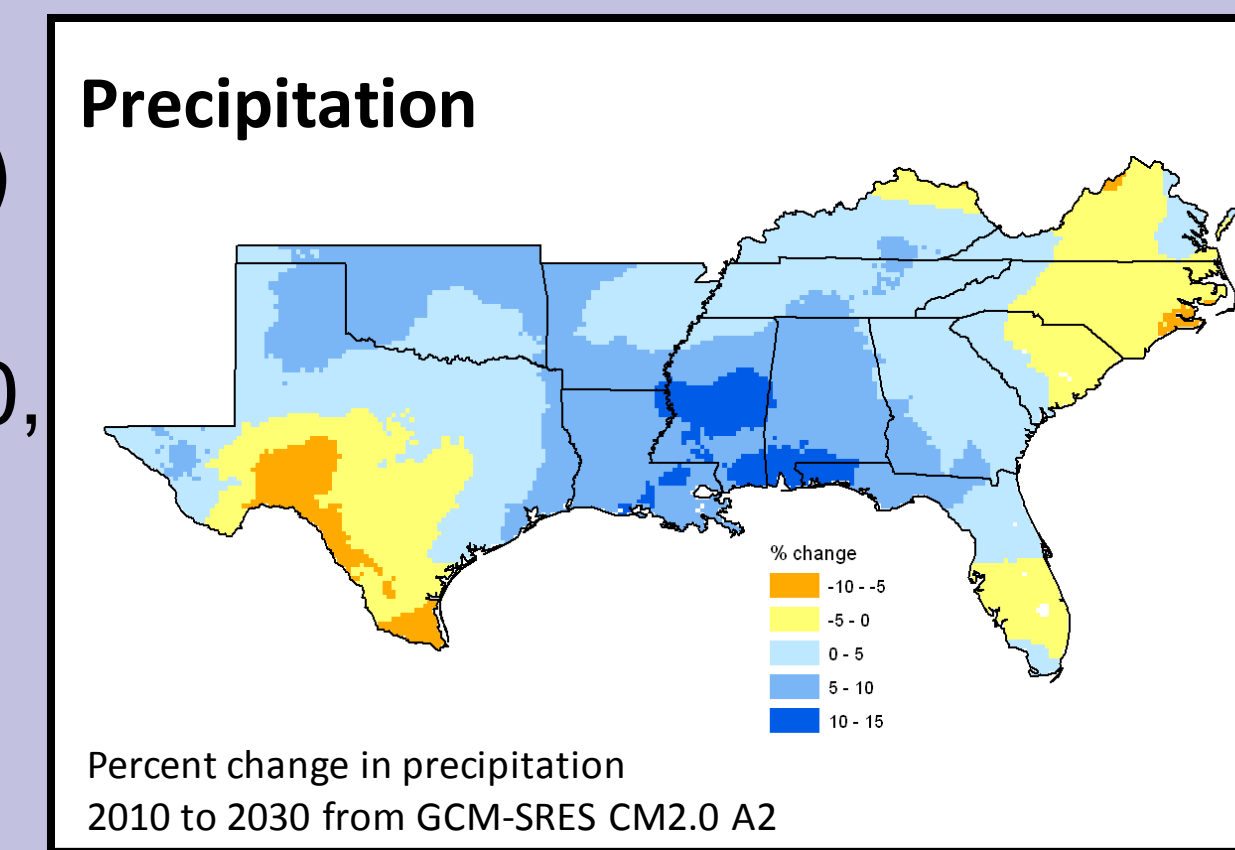
- Direct Impacts
- Management Options
- Geographic Location
- Interactions
- Supporting Literature



Projected Climate Change

IPCC AR4 forecast data at 1/8° resolution (from CMIP3)

- SRES: A1B, A2, B1
- GCMs: CGCM31, CCSM3.0, CM2.0, HadCM3
- Monthly precipitation and temperature from 1950 to 2100



Plus interactive tools to examine biodiversity, forest productivity, water availability, and other risk forecasts

Report Generation

- Exportable report contains climate change projections, direct impacts, and management options
- Climate change projections include maps and figures generated from user defined selections and scales
- Includes source and supporting literature citations
- For USFS planners, reports also include forest plan components linked to climate change impacts and management options
- Version 2.0 will include prioritized impacts and management options

Sample TACCIMO Reports

TACCIMO report documenting biodiversity-related climate change science for Cherokee National Forest (first page)
 TACCIMO report documenting USFS forest plan components for the Cherokee National Forest related to biodiversity
 TACCIMO geospatial report summarizing nine climate change projections for the southern region of the United States
 Maps from a TACCIMO geospatial report comparing temperature projections for two different climate change projections