Northeast Conservation Framework

Regional Conservation Needs organized by Framework

GOAL-SETTING

Which species/habitats to conserve, when, how much, and who will work on it?

- Design & Implement Conservation Strategies for SGCN (RCN 5)
- Landscape Scale Habitat Initiatives (formerly RCN 7)

BIOLOGICAL ASSESSMENT

What do we know about the status of priority wildlife?

- Regional Habitat Cover Maps (RCN 1)
- Identify and Assess Threats to SGCN (RCN 7)
- Climate Change (RCN 8)
- Geospatial Condition Analysis (RCN 10)
- Factors in Regional Decline of SGCN (RCN 12)

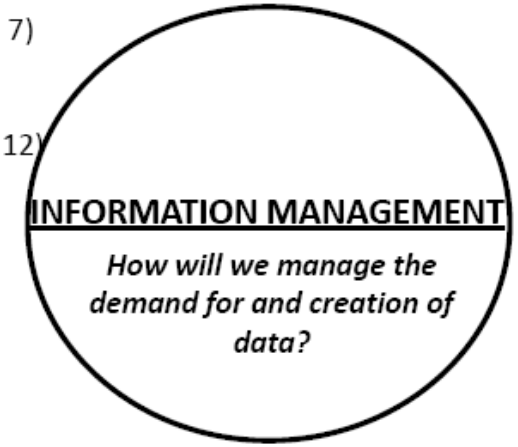
CONSERVATION DESIGN

Where are the best places to conserve the most species and habitats?

- Regional Focus Areas and Corridors (RCN 4)
- Design & Implement Conservation Strategies for SGCN (RCN 5)

Regional Focal Areas (formerly RCN 4)

- Landscape Scale Habitat Initiatives (formerly RCN 7)



TRIAGE

Which issues demand immediate attention?

- Identify Priority SGCN (RCN 2)
- Identify Invasive Species (formerly RCN 2)

SCIENCE TRANSLATION

How do we maximize the utility of science?

- Design & Implement Conservation Strategies for SGCN (RCN 5)
- Landscape Scale Habitat Initiatives (formerly RCN 7)

Guidelines for Local Planning Boards (formerly RCN 4)

MONITORING, EVALUATION AND RESEARCH

What new information will we gather to support conservation?

- SGCN Data Gaps (RCN 3)
- Regional Indicators and Measures (RCN 6)
- Invertebrate Online Database (RCN 11)
- Instream Flow (formerly RCN 3)
- Factors in Regional Decline of SGCN (RCN 12)

ACTION DELIVERY

How will we most efficiently put conservation on the ground?

- Design & Implement Conservation Strategies for SGCN (RCN 5)
- Landscape Scale Habitat Initiatives (formerly RCN 7)

CONSERVATION ADOPTION

How do we get the right people in the right places to adopt prescribed conservation actions?

- Standards for Wind Turbine Sites (RCN 9)
- Guidelines for Local Planning Boards (formerly RCN 4)
- Landscape Scale Habitat Initiatives (formerly RCN 7)
- Design & Implement Conservation Strategies for SGCN (RCN 5)

Northeast Conservation Framework

Detailed Descriptive Format
First Iteration

GOAL-SETTING

- ***Which species/habitats to conserve, when, how much, and who will work on it?***
- Derive population/habitat goals from biological assessments
- Derivee population/habitat goals from socio-political assessments
- Set levels for multi-species population and habitat conservation goals
- Consider jurisdictional issues with respect to species biogeography
- Delegate planning/implementation to achieve goals
- Set timeline and allocate resources to achieve goals
- Interpret social and biological assessment results
- Evaluate policy-driven charges/constraints

CONSERVATION DESIGN

- ***Where are the best places to conserve the most species and habitats?***
- Integrate the best science to design the best landscapes for all wildlife
- Prioritize species/habitat distributions to meet multiple goals
- Draw on assessments to identify sustainable landscapes
- Aportion goals according to current/future conditions
- Aportion goals according to species biogeography
- Evaluate feasibility of alternate landscape designs
- Weigh options under alternate future scenarios
- Evaluate multi-species risks/benefits

BIOLOGICAL ASSESSMENT

- ***What do we know about the status of priority wildlife?***
- Model current and future species and habitat distributions
- Quantify trends in abundance and distribution
- Quantify factors affecting distribution and abundance
- Quantify environmental conditions and trends
- Describe social and political factors affecting wildlife
- Forecast risks, threats, viability or potential take
- Forecast future environmental conditions
- Project opportunities for population growth
- Estimate harvest limitations
- Evaluate species-habitat relationships
- Predict habitat capacity

INFORMATION MANAGEMENT

- ***How will we manage the demand for and creation of data?***
- Ensure data flow among framework elements
- Develop data sharing agreements among partners
- Simplify and standardized data entry/collection
- Comprehensive assessment of data needs
- Database design and development
- Support for data analysis capabilities
- Facilitate adaptive management dataflow
- Compile seamless regional natural resource data layers

SCIENCE TRANSLATION

- ***How do we maximize the utility of science?***
- Draft conservation plans
- Describe complex issues in simple terms
- Translate data into useful implementation tools
- Produce land-use planning media
- Identify key landowners/political units
- Develop decision support tools
- Draft accessible documentation
- Develop step-down plans

TRIAGE

- ***Which issues demand immediate attention?***
- Screen for prominent trends
- Address emerging issues
- Identify representative species
- Identify information gaps
- Identify priority research need
- Identify priority species for assessment
- Identify priority habitats for assessment

CONSERVATION ADOPTION

- ***How do we get the right people in the right places to adopt prescribed conservation actions?***
- Strategically disseminate plans
- Discourage "random acts of conservation"
- Engage opinion leaders to promote key objectives
- Track the status of candidate conservation adopters
- Organize local partnerships to help implement plans
- Deliver targeted outreach to key landowners and partners
- Recruit key landowners and partners to enroll their properties

MONITORING, EVALUATION AND RESEARCH

- ***What new information will we gather to support conservation?***
- Research species/habitat biology
- Test assumptions about causality
- Compile historic species occurrence data
- Measure the direct effects of management
- Measure wildlife response to management
- Survey the distributions of wildlife and habitat
- Evaluate the human demographics of priority areas
- Acquire data on political boundaries and land ownership
- Monitor species, habitats, & environment to detect trends
- Conduct polling to assess opinions and other human dimensions

ACTION DELIVERY

- ***How will we most efficiently put conservation on the ground?***
- Provide technical assistance to landowners/managers that have been recruited to implement prescribed actions
- Develop collaborative local partnerships to share delivery tasks
- Create efficiencies of scale to deliver actions
- Develop conservation programs that are either unrestrictive or well-tailored to meet objectives
- Delegate clear responsibilities for project funding, planning, contracting, and on-the-ground delivery
- Develop Best Management Practices
- Resolve multiple use and multi-species conflicts

Regional Conservation Needs

(first edition 2006)

George Matula

1

Develop base map

#47, 56, **71**

2

ID regional high priority species

#3, **8**, **20**, 28

3

ID data gaps, design data collection protocols, and collect data

#6, 10, **45**, 46, 50, **54**, 59, 64, 66

4

Identify and map RGCN species' focus areas

#4, **12**, 18, 19, **40**, 57, 60, 63

5

Design and implement conservation strategies

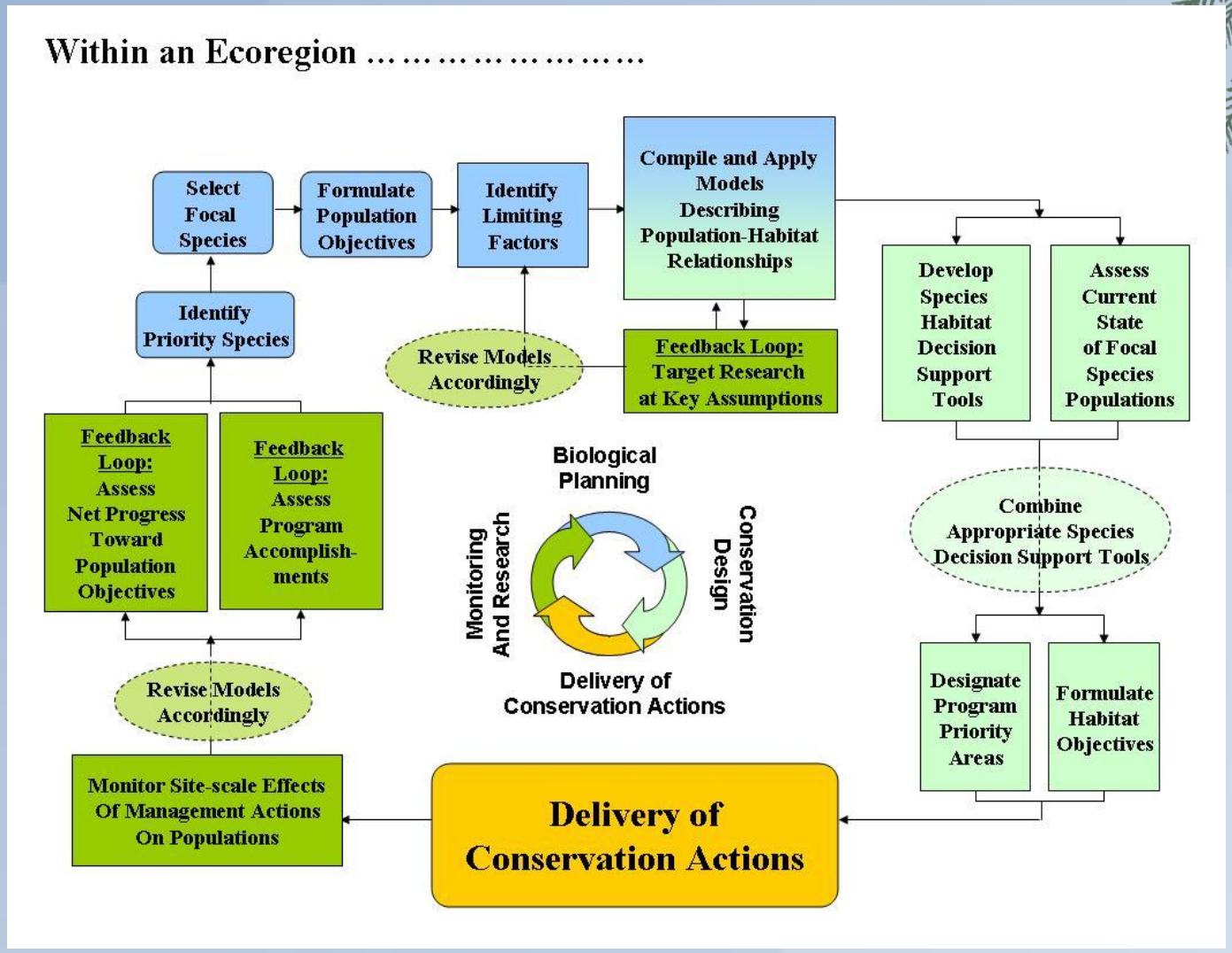
#15, **21**, 26, 27, 29, **31**, 32, 33, 38, 43, 44, **49**, 67, 68

6

Design and implement monitoring program

#2, 13, **73**

The Strategic Habitat Conservation Approach



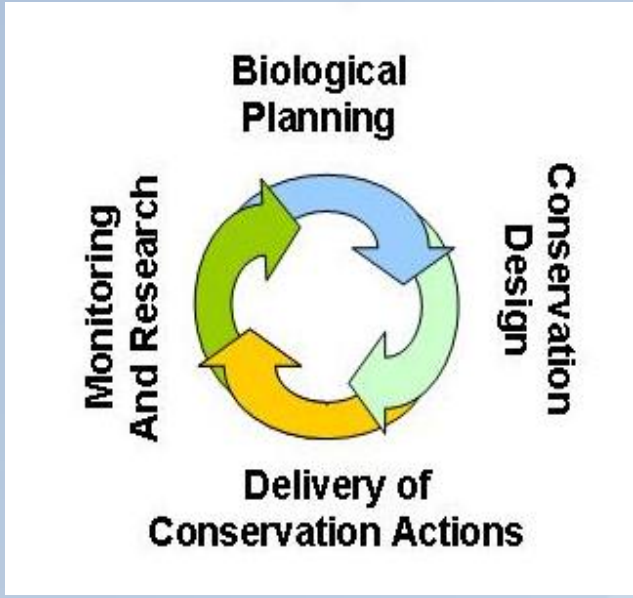
U.S. Fish and Wildlife Service and U.S. Geological Survey, 2006

Strategic Habitat Conservation and the 8 Elements of State Wildlife Action Plans

Element 1: Species status assessment

Element 2: Habitat status assessment

Element 3: Evaluate problems & solutions



Element 5: Manage data to:
-detect changes
-assess effectiveness
-adapt management

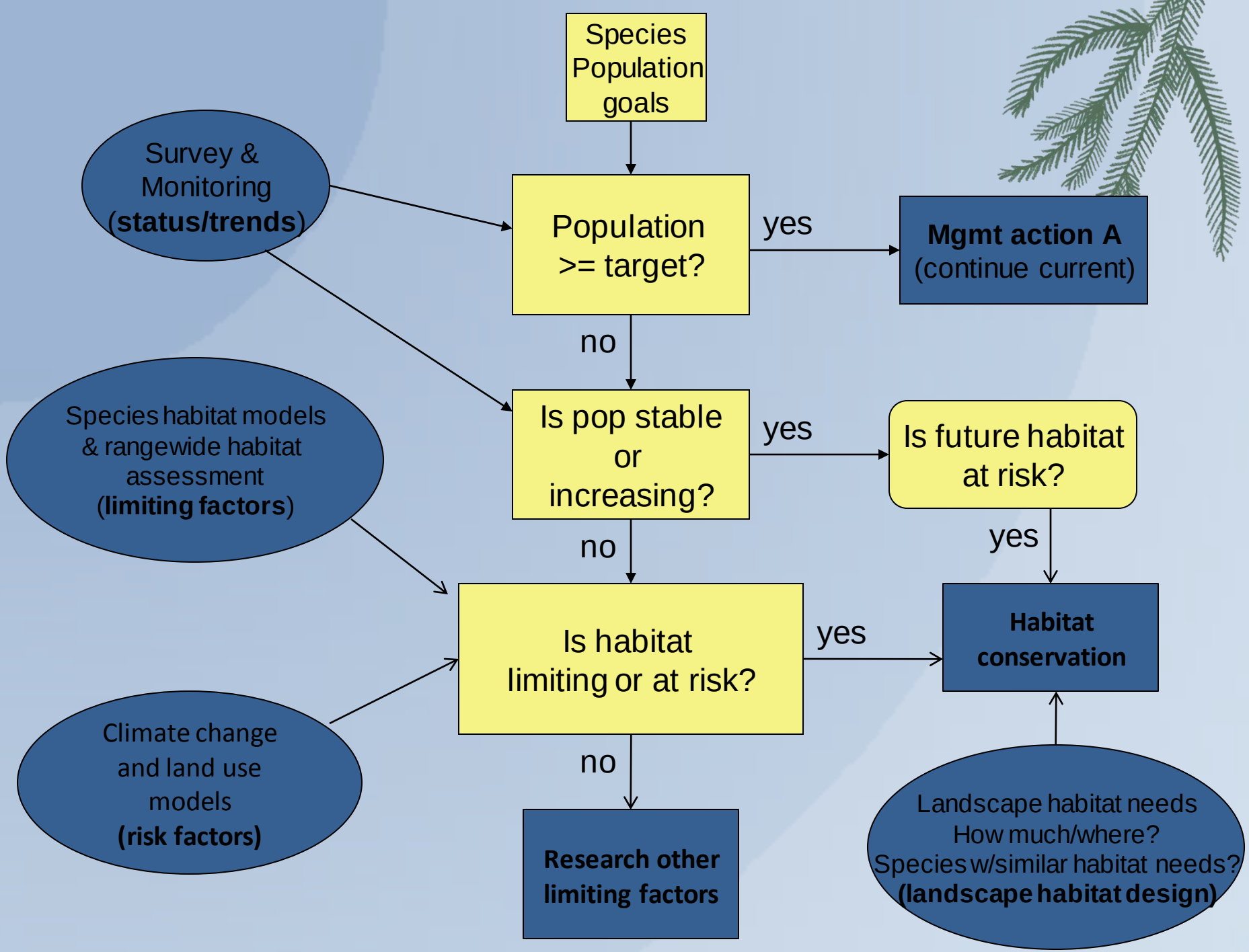
Element 4: Prescribe actions

Element 5: Monitor species, habitats, outcome of actions

Element 4: Prioritize actions

Element s 7&8: Coordinate implementation

Strategic Habitat Cons. Element	Sub-element
Biological Planning	Biological Planning Units
	Priority Species
	Population Objectives
	Limiting Factors
	Species/Habitat Models
Conservation Design	Landscape/Habitat Assessment
	Assessment of Conservation Estate
	Decision Support Tools
	Conservation Objectives
	Integrate Multiple Species Objectives
Conservation Actions	Program Objectives
	Conservation Delivery Mechanisms
	Communication and Education Delivery Mechanisms
Outcome-based Monitoring	Conservation Tracking System
	Habitat Inventory and Monitoring Program
	Population Monitoring Program
Assumption-driven Research	Species/Habitat Model Assumptions
	Conservation Treatment Assumptions
	Keyfactor/Sensitivity Analyses
	Spatial Data Analyses


Species Population goals
Survey & Monitoring (status/trends)
Population >= target?
yes
Mgmt action A (continue current)
no
Species habitat models & rangewide habitat assessment (limiting factors)
Is pop stable or increasing?
yes
Is future habitat at risk?
yes
no
Is habitat limiting or at risk?
yes
Habitat conservation
Climate change and land use models (risk factors)
no
Research other limiting factors
Landscape habitat needs How much/where? Species w/similar habitat needs? (landscape habitat design)

North Atlantic Landscape Conservation Cooperative – Framework Elements

- **Conservation targets/population goals** – at a regional level
- **Species/habitat models** – regional levels – across species distribution
- **Landscape design** – combine multiple species needs into landscape designs that support regional population goal levels
- **Habitat change over time** – assess with respect to stressors such as sprawl and climate change – incorporate into landscape designs
- **Conservation "translation" tools** – translate the science foundation into landscape patterns easily conveyed to public and landowners – work at community levels
- **Information management**
- **Monitoring** -serve as a "community of practice" for conservation partners – what have we learned, what works and what doesn't?

LCCs Fundamental Objective:

To define, design, and deliver landscapes that can sustain natural and cultural resources at desired levels nation-wide.

(From Georgia LCC Coordinators Meeting April 2011)