The Recovery Planning and Implementation Process and the Eastern Massasauga Rattlesnake
Recovery Planning and Implementation (RPI)*

*RPI Process relatively new for FWS.
The SSA Framework is a way of thinking about biological status assessments under the ESA.

Its purpose is to describe the viability of species in a way that supports our ESA decisions.
RPI Recovery Plan

INTRODUCTION

RECOVERY VISION

RECOVERY STRATEGY

STATUTORY REQUIREMENTS

RECOVERY CRITERIA

RECOVERY ACTIONS

TIME AND COST ESTIMATES
Recovery Plan:

• Overall strategy for recovery of species through actions.

RIS:

• Strategy for implementation of the recovery plan through specific activities in a flexible, adjustable format.
Actions (Recovery Plan) → Activities (RIS)

RP Action:
Establish additional populations in Y drainage.

RIS Example Activities:
- Identify # populations necessary for this particular drainage
- Survey habitat to identify suitable sites
- Restore habitat where necessary
- Introduce/translocate
- Monitor
- Revise approach if monitoring indicates need
RIS outside of the Recovery Plan allows for:

- **Ability to adjust** in response to new information, completion of activities, initiation of activities.
- **Opportunity for adaptive management** (depending on design of activities).
- **Reduction** of number of plan revisions.
- **Savings** of time and $ currently spent on plan revisions.
- **Avoiding** current situation of plans quickly becoming outdated.
“EMR” is a wide-ranging pit viper, historically found in 10 states and Ontario.

Listed as Federally Threatened in October 2016.

One of the first wide-ranging vertebrates to be listed following adoption of RPI process, thus one of the first to go entirely through the process.
Recovery Implementation Strategy for Eastern Massasauga Rattlesnake

Timeline:

- EMR SSA completed by FWS June 2016.
- EMR RPI Recovery Plan collaboratively drafted by FWS and state agency partners, Jan 2017-July 2018.
- Draft Recovery Plan currently under review by DOI/FWS Headquarters.
- RIS process started October 23, 2018, in Ohio.
Recovery Implementation Strategy for Eastern Massasauga Rattlesnake

- Series of meeting with all states within EMR range.
- States determined agenda and invited key stakeholders.
- Most states opted for a “brainstorming” session to identify unique priorities.
- FWS and states currently working closely to distil brainstorms to FWS Recovery Tables (mandatory formats).
- States are providing narratives.
- State recovery plans or strategies may be appended to eventual RIS.
<table>
<thead>
<tr>
<th>Action #</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Using appropriate habitat management techniques, <strong>maintain</strong> the currently occupied fields in a suitable vegetative and structural state to sustain Massasaugas. This includes controlling succession and treating invasive plant species.</td>
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<tr>
<td>2</td>
<td><strong>Rescue</strong> small, declining SW OH populations through augmentation.</td>
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<td>3</td>
<td>Develop sustainable <strong>system for management</strong> to maintain suitable habitat in perpetuum.</td>
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<td>4</td>
<td><strong>Restore</strong> - using appropriate habitat management techniques - areas that are currently unsuitable (i.e., later successional state, monoculture of invasives, row crops) to a suitable vegetative and structural state to increase the total area of suitable Massasauga habitat.</td>
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<td>5</td>
<td><strong>Acquire</strong> additional habitat surrounding occupied sites</td>
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<td>6</td>
<td>Conduct <strong>research</strong> to identify and abate threats, measure effectiveness of actions, and guide conservation efforts.</td>
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<td>7</td>
<td>Establish new sites through <strong>repatriation</strong></td>
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<td>8</td>
<td>Further <strong>education</strong> and outreach/inreach to support conservation efforts</td>
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<td>Develop appropriate metrics and implement regular <strong>assessments</strong> of fields to track habitat suitability and management needs as well as a system for reporting and tracking management.</td>
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<td>1.2</td>
<td>Maintain habitat in 110 occupied fields totaling 2,792 acres at 8 management units in Ohio.</td>
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| Task 1.2.7 | Maintain 4 fields totaling 10.1 ac at Rome State Nature Preserve |
| Task 1.2.8 | Maintain 9 fields totaling 63 ac within Grand River Lowlands (outside of Rome SNP) |
| Task 1.2.9 | Develop additional access (e.g., creek/ditch crossings) to allow equipment access at Rome and Prairie Rd. Fen SNPs. |
Thank you to the Ohio EMR Team for all their efforts and input into the Recovery Planning and Implementation Process!