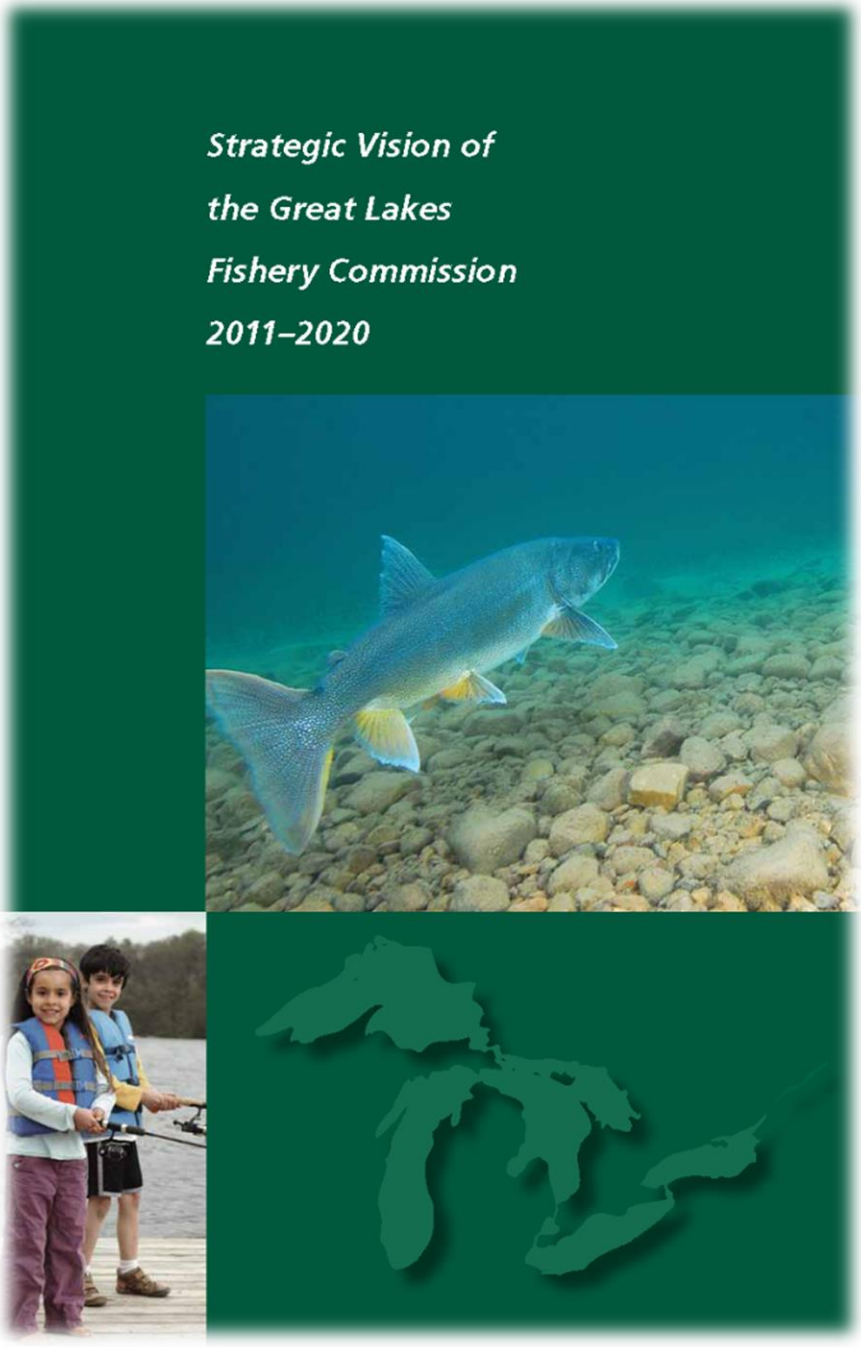
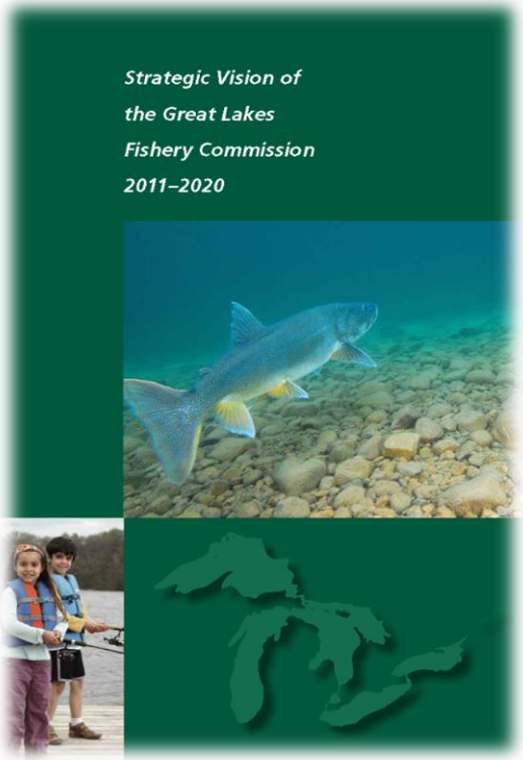


Mid-Decadal Review of the Strategic Vision 2011-2020

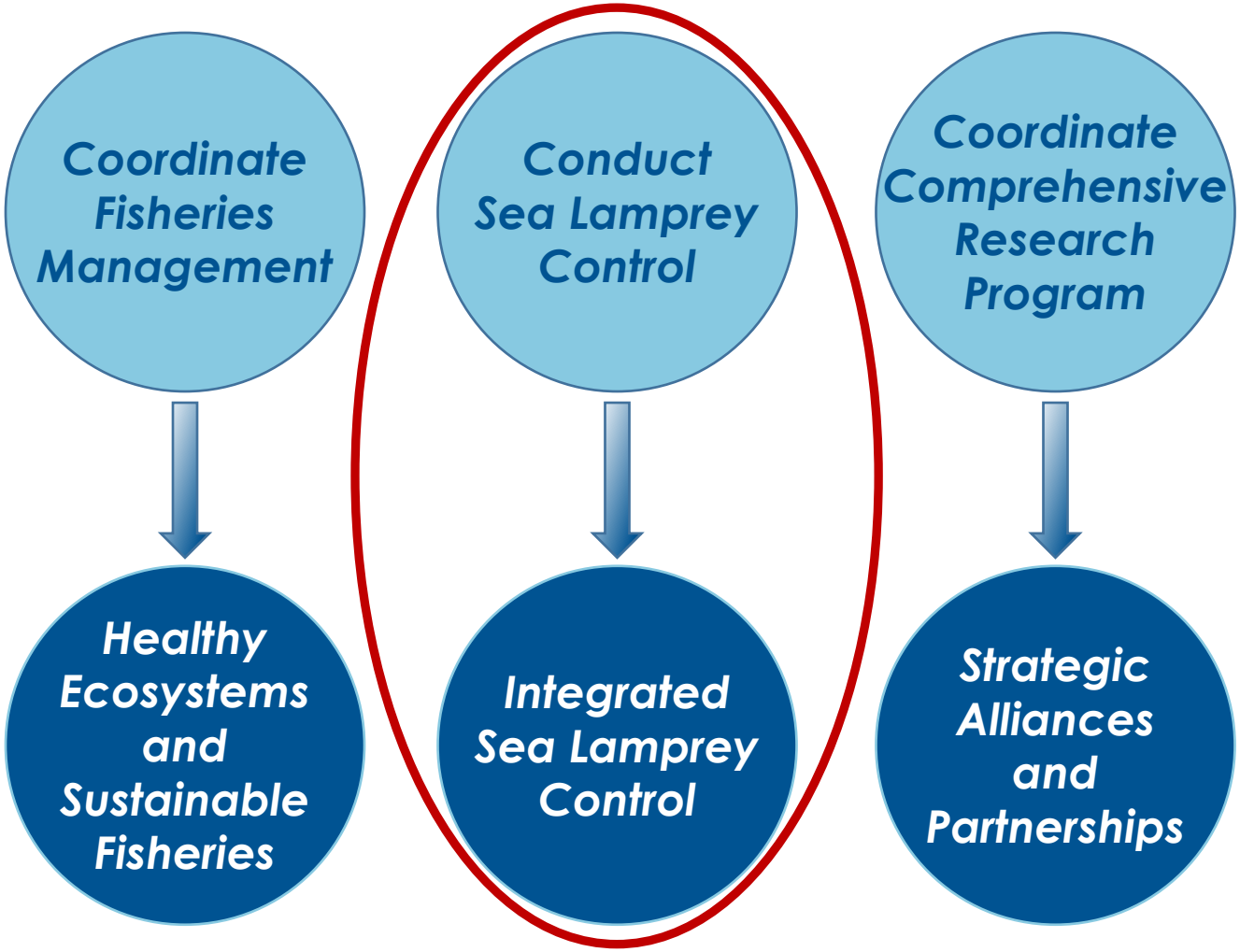
Why a Strategic Vision?

- "Operationalizes" 1954 Convention on Great Lakes Fisheries
  - Convention = roadmap (long-term)
  - Vision = driving directions (10 years)



1954 CONVENTION ON GREAT LAKES FISHERIES

ASSIGNED DUTIES



PILLARS

THE STRATEGIC VISION OF THE GLFC, 2011 - 2020

Structure of Vision

PILLAR: representation of an area of work

GOAL: an essential accomplishment

STRATEGY: a specified approach

OUTCOME: a measure of progress

Structure of Mid-Decadal Review

EVALUATION OF EACH OUTCOME

STATUS: qualifying statement of evaluation

PERFORMANCE: above, meets, does not meet expectations

PROGNOSIS: outlook for 2nd half of decade

EVALUATION METRICS

MEETING OR EXCEEDING EXPECATIONS:
Adequate resources, major impediments not foreseen

NOT MEETING EXPECTATIONS or MEETING WITH CONCERNS:
Challenges have been identified, but a strategic plan is in place and adequate resources are available

BELOW EXPECTATIONS:
Inadequate resources (money or personnel), guidance or intervention required

PILLAR ONE:
Healthy Great Lakes Ecosystems and Sustainable Fisheries

PHOTO: PAUL VECSEI

PILLAR STATEMENT:
The commission will encourage the conservation and rehabilitation of healthy Great Lakes ecosystems that sustain fisheries and benefit society.

GOAL 1: Eliminate further losses of native species and rehabilitate depleted populations.

Strategy 1: Prevent the loss of native fish species from any Great Lake.
Outcome: No native species will have been lost from any Great Lake.

Strategy 2: Encourage management actions to increase natural reproduction of lake trout.
Outcome: Rehabilitation of lake trout will be achieved and maintained throughout Lake Superior.
Outcome: Rehabilitation of the shallow-water form of lake trout will be achieved in Lake Huron's main basin.
Outcome: Progress towards lake trout rehabilitation in Lakes Erie, Michigan, and Ontario will be demonstrated by an increase in the population of naturally reproduced juvenile lake trout.

Strategy 3: Promote development and implementation of rehabilitation plans for depleted native fishes.
Outcome: Rehabilitation plans for deep-water ciscoes will be developed and implemented.
Outcome: Naturally produced populations of deepwater ciscoes will increase in Lake Ontario.
Outcome: Natural recruitment of lake sturgeon will increase in Great Lakes tributaries.

PILLAR TWO:
Integrated Sea Lamprey Control

PHOTO: T. LAWRENCE, GLFC

PILLAR STATEMENT: *The commission will suppress sea lamprey populations to levels that permit achievement of fish community objectives for each Great Lake.*

GOAL 1: Suppress sea lamprey populations to target levels.

Strategy 1: Implement lampricide treatment strategies to suppress sea lamprey populations to target levels in each Great Lake.
Outcome: Sea lamprey abundance and wounding rates on lake trout will be at, or below, target levels in each Great Lake.

Niagara Falls served as a natural barrier to the sea lamprey. The falls were bypassed by the Welland Canal. PHOTO: T. LAWRENCE, GLFC

Strategy 2: Conduct detection and distribution surveys to identify all sources of larval sea lampreys.
Outcome: Sources of sea lamprey will be delineated and control efforts will be more effectively prioritized among streams.

Strategy 3: Measure the effectiveness of lampricide applications and account for its variation among streams.
Outcome: New treatment protocols that result in more effective application of lampricides will be developed and implemented.

PILLAR THREE:
Strategic Alliances and Partnerships

PHOTO: T. LAWRENCE, GLFC

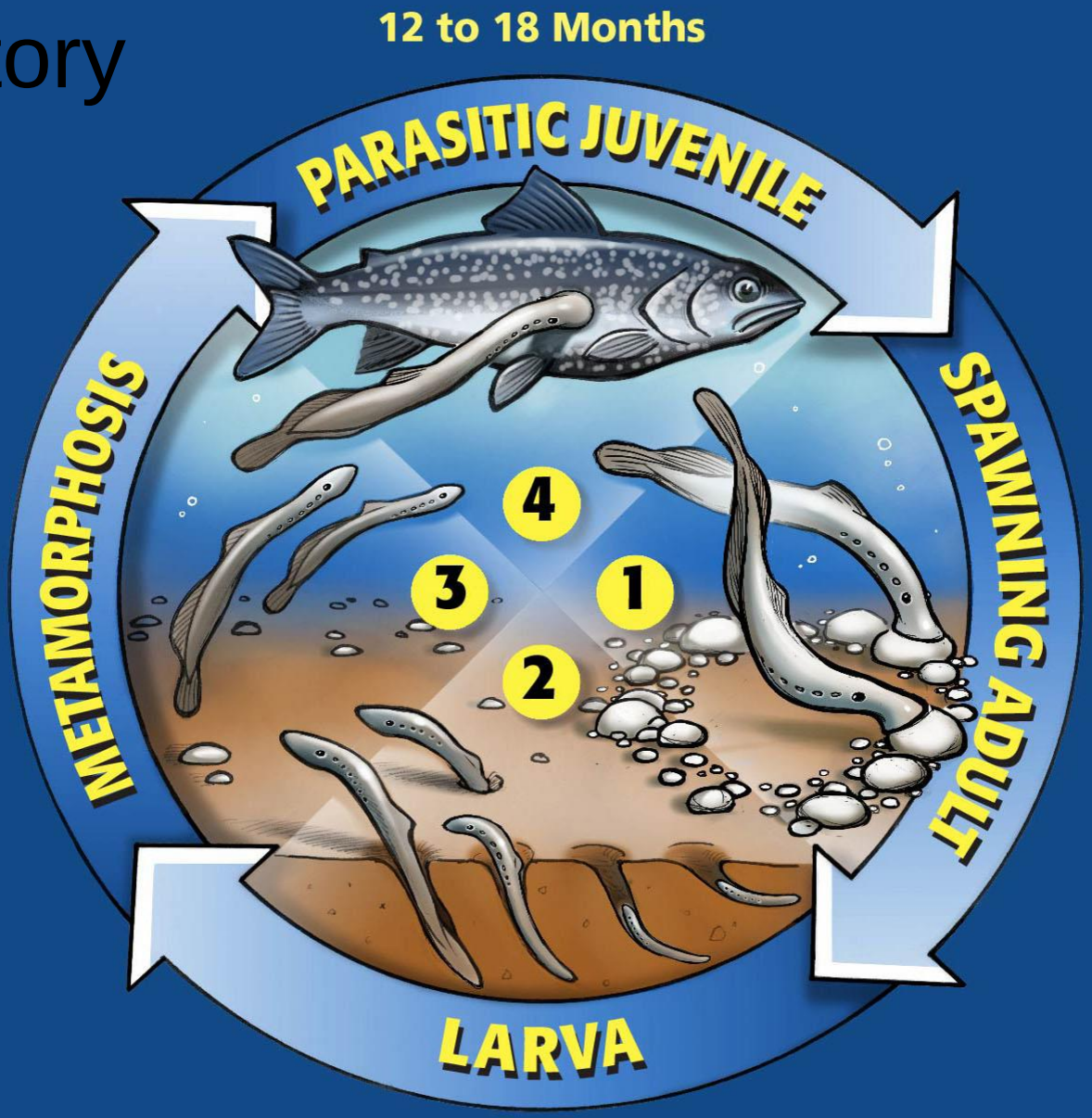
PILLAR STATEMENT: *The commission will build and maintain effective strategic alliances to promote sustainable fisheries and a healthy Great Lakes ecosystem.*

GOAL 1: Strengthen inter-jurisdictional fishery management.

Strategy 1: Facilitate the implementation of A Joint Strategic Plan for Management of Great Lakes Fisheries.
Outcome: Agencies signatory to the Joint Strategic Plan will have met regularly to coordinate management.
Outcome: Lake Committees will have developed, revised, and implemented Joint Strategic Plan products – such as fish community objectives, environmental objectives, total allowable catches, annual lake committee reports, and state-of-the-lake reports – to evaluate progress on the achievement of fish community, environmental, and law enforcement objectives.

Strategy 2: Facilitate the marking of all trout and salmon stocked into the Great Lakes to improve lakewide assessment.
Outcome: Mass marking equipment will have been acquired and used throughout the basin.
Outcome: The Council of Lake Committees will have developed and overseen a coordinated process to collect, maintain, and analyze marking data.
Outcome: The extent of natural reproduction will have been determined, and the effectiveness of stocking programs and methods known.

Life History



Pillar 2: Integrated Sea Lamprey Control

Goal 1: Suppress sea lamprey populations to target levels

ABOVE EXPECTATIONS

Strategy	Outcomes
3) Evaluate lampricide applications, account for variations among streams	New treatment protocols will be developed and implemented

Pillar 2: Integrated Sea Lamprey Control

Goal 1: Suppress sea lamprey populations to target levels

MEETS EXPECTATIONS OR BELOW EXPECTATIONS W/PLAN

Strategy	Outcomes
1) Implement lampricide treatment strategies to suppress populations to target levels	Abundance, wounding rates will be at or below target levels
2) Conduct surveys to identify all sources of larval sea lampreys	Sea lamprey sources will be delineated, control efforts will be more effectively prioritized
5) Construct, maintain a network of barriers	Sea lampreys will have reduced access to spawning habitat
6) Deploy trapping methods to increase capture	Effective and efficient trapping techniques will be developed, implemented

Pillar 2: Integrated Sea Lamprey Control

Goal 1: Suppress sea lamprey populations to target levels

BELOW EXPECTATIONS WITHOUT RESOURCES OR PLAN

Strategy	Outcomes
4) Quantify relationship between spawning sea lamprey abundance, lake trout abundance, and lake trout wounding rates	Inconsistencies among estimates of sea lamprey abundance and observed changes in lake trout wounding rates will be accounted for

STATUS:

- Lake trout abundance and wounding data are robust
- **Uncertainty around abundance & wounding of other hosts**
- Additional survey effort required to address uncertainties

Relationship cannot be conventionally determined without information on other hosts.

Pillar 2: Integrated Sea Lamprey Control

Goal 2: Increase effectiveness and efficiency of sea lamprey control to reduce populations

MEETS EXPECTATIONS OR BELOW EXPECTATIONS W/PLAN

Strategy	Outcomes
1) Develop cost-effective trapping methods, including release of pheromones, to increase capture	One new method will be deployed
2) Evaluate repellent-based control methods to deter sea lampreys from spawning habitat	Efficacy of a method will be assessed in field trials
3) Improve existing, develop new rapid assessment methods to determine abundance of larval sea lampreys	Effectiveness of assessing larval sea lamprey distribution and abundance will be increased
4) Implement, evaluate integrated control techniques	Existing & newly developed control methods will be used, abundance further reduced

Pillar II: Integrated Sea Lamprey Control

Summary: 9 of 10 strategies (two goals) meet or exceed expectations

Thank you –
Questions or Comments?