Salmon Information Management

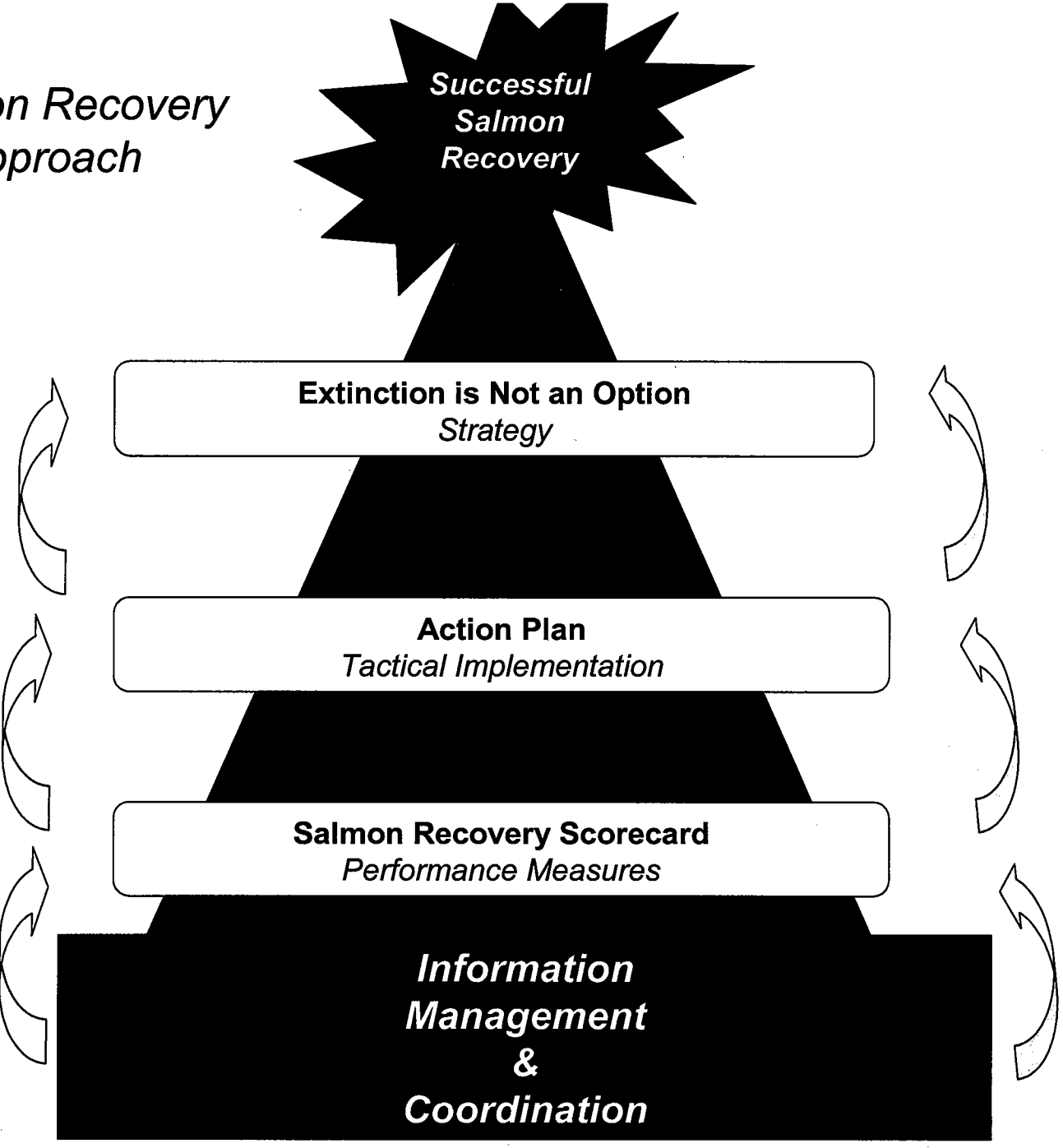
A Proposal to Identify and Address the Information Management Issues

Genesis of SIM Proposal

- IAC Presentation - Public Lands Inventory Data Issues - Summer '99
- SRS Enhanced IT Objective Presentation - February, '00
- SIM Proposal is result of work on defining approach to information issues

(DFW, ECOL,WSDOT, DIS, AGR, GSRO, & DNR)

Salmon Recovery Approach



June, 2000

Salmon Recovery Information Issues Have *Science & IT Components*

- **Science Based Data Issues**
  - What data is needed, (monitoring strategy)
  - How is it collected, (methods & protocols)
  - How is it analyzed, (which analytical models)
  - Who provides & how often
  - When and how will it be reported

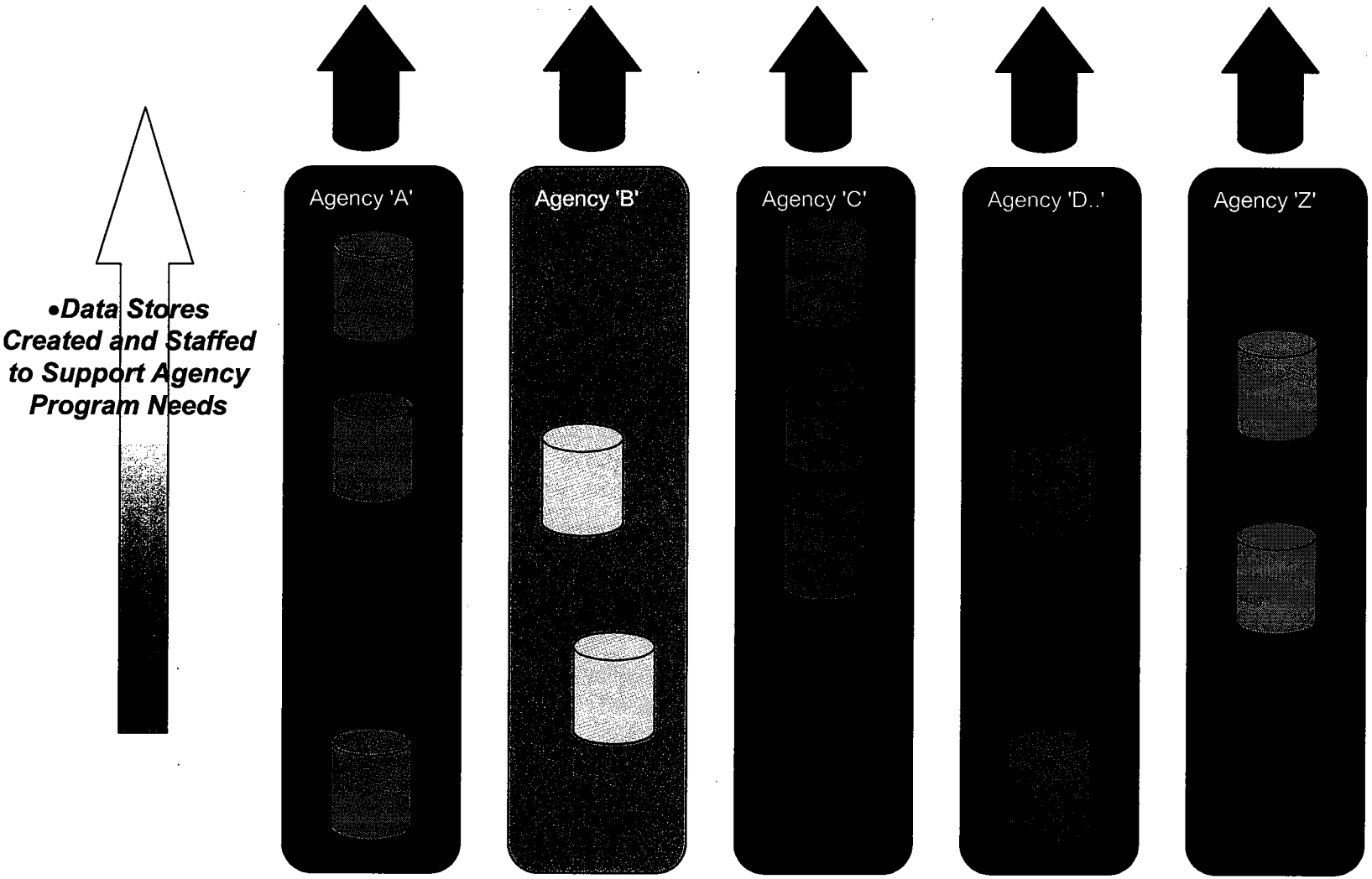
Linkage!

Science & IT Issues

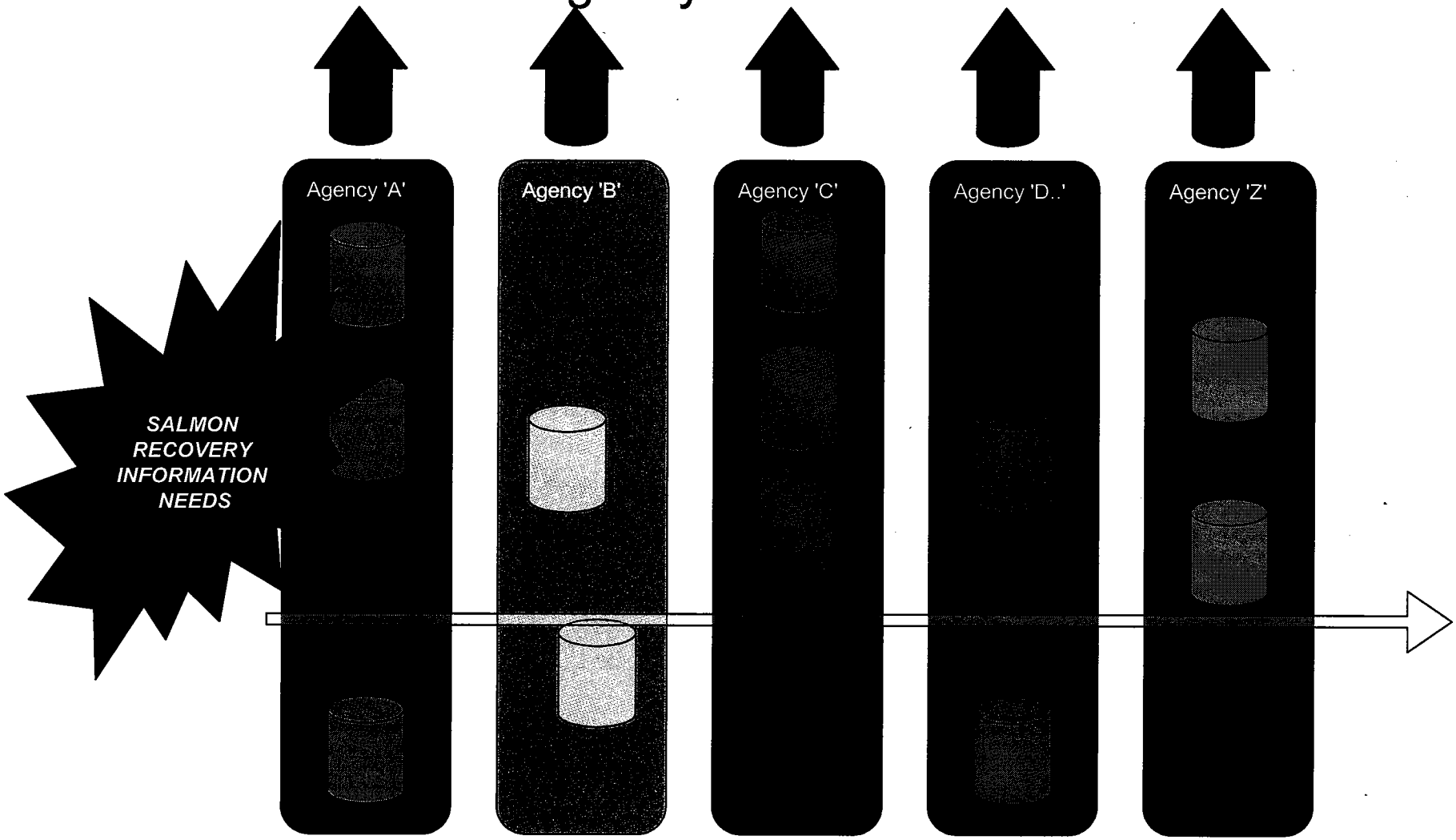
How Are We Addressing These?

• **Science Based Data Issues** • What data is needed, (monitoring strategy) • how is it collected, (methods & protocols) • how is it analyzed, (which analytical models) • who provides & how often • when and how will it be reported	**Science Panels** **&** **Scorecard Data Stewards** **&** **Agency Program Scientist** **&** **Others**
Linkages?	

Data Resources Developed to Support Individual Agency Priorities



Difficult to Respond to Business Challenges That Span Agency Data Resources



Significant SR Data Resources

...candidates for collaboration on access & information management issues

- SHIAAP, SASI, StreamNet, SSHEAR
- Limiting Factors Analysis
- EIM, F/S ID, Limited Waterbodies.....
- Framework Data Layers (Hydrology, Land Ownership), Forest Roads, Forest Land Management
- Culverts, Transportation, PRISM, Others...

Information Issues

- Disparate data stores - minimal cross-agency integration
- Agencies are staffed to meet internal requirements, difficult to rise above
- Lack of focused & dedicated resources to address cross agency needs
- Clarity around roles …..isn't someone else taking care of it….
- Problems are complex….where do we start?

Current Scorecard Related Efforts

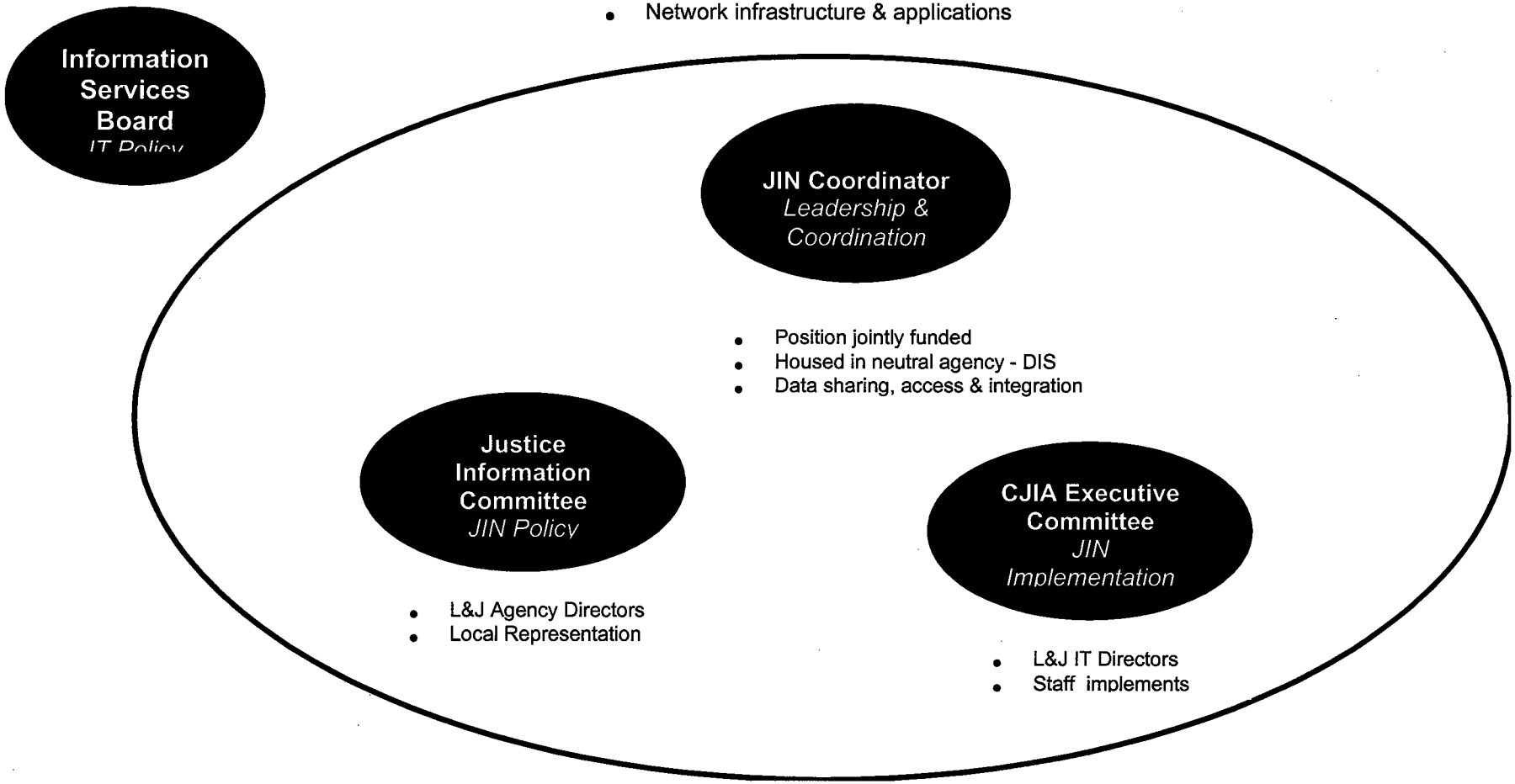
- Information Assessment - SRS Survey
  - what do we have & status
  - what is missing
- SRS Indicator Web Application
  - provide access to SRS Indicator information
  - leverage existing salmon application development activity

Issues Not Unique to Salmon Recovery

- State's Law and Justice Community faced something similar several years ago - their response,
- ***Justice Information Network (JIN)***

Justice Information Network

- Information integration and access
- Network infrastructure & applications



JIN Success

- Collaboration on Plan/Blueprint for data sharing & integration
- Assessment of needs led to creation of network infrastructure & applications
- JIN is 'barrier buster' for addressing long standing, recognized needs
- Reduce duplication of effort by working together on common IT issues
- DOJ regards JIN as a 'national model'

SIM Proposal Elements

- ***full time position*** devoted to coordinate and facilitate issue resolution
- ***technical workgroup*** dedicated to information management for salmon recovery
- ***policy support*** provides information management policy recommendations to SR policy body

SIM Coordinator

- *Role - tactical leadership & coordination*
  - Provide tactical leadership & Chairs technical forum
  - Day to day task management for information issue identification & resolution
  - Facilitates interface between science and information - scientists still enjoy data sovereignty
- *Implementation*
  - Full-time dedicated position funded through Interagency Agreement - similar to JIN model
  - Position located in DIS supported by DFW, WSDOT, ECOL, AGR, GSRO, DNR (*suggested agencies*)

SIM Technical Workgroup
hosted by WAGIC

- *Role - IT issue resolution*
  - Determine existing capabilities & needs
  - ID issues, recommend priorities & solutions
  - Recommends IT policy and standards
- *Implementation*
  - Scorecard Workgroup becomes seed
  - Additional representation as necessary
  - Leverage WAGIC Framework Management success

Why WAGIC?

- Recognized Forum for addressing data sharing - broad participation
- Strategic perspective and expertise in spatial information management
- Washington Spatial Information Clearinghouse - web based data discovery tool - 1000 plus data resource descriptions 120 plus Salmon Related
- Framework (Data) Management Group

WAGIC Framework Management

- WAGIC Hosted multi-agency activity focused on developing statewide data themes
  - SR Action Plan Item 'Dat-2' (p.151)
  - Data themes *Hydrology, Land Ownership & Transportation*
  - SIM proposal will leverage FMG experience & success

Salmon Information Managment

- Information integration and access
- Network infrastructure & applications (potential future)

Information Services Board
IT Policy

Science Panel(s)

SIM Coordinator
Tactical Leadership & Coordination

Salmon Recovery Policy Body
SIM Policy

- Position jointly funded
- Housed in neutral agency - DIS
- Data sharing, access & integration

WAGIC Spatial IT Workgroup
SIM Implementation

- Scorecard Workgroup seed
- NR Agency IT & GIS Managers
- Agency Staff implements

SIM Initial Activities

- Salmon Info Survey
- Tactical BluePrint/Plan
- Scorecard Indicator Web Application

Potential

SIM Success

in collaboration with policy body and scientists...

- Joint assessment of critical information management needs - Salmon Info Needs Survey
- Tactical BluePrint for meeting needs
- SRS Indicator Web Application
- Recommend Standards
- Promote effective use of GIS…support modeling, depict the results, ...

Coordinating & Managing the *Science & IT Components*

- **Science Based Data Issues**
  - What data is needed, (monitoring strategy)
  - How is it collected, (methods & protocols)
  - How is it analyzed, (which analytical models)
  - Who provides & how often
  - When and how will it be reported

Science Panels
&
Scorecard Data Stewards
&
Agency Program Scientist

Coordinated Interface between data & information management

Proposal creates process & approach

- identify & utilize cross-agency IT capabilities,
- identify additional infrastructure needs and,
- facilitates discussion between science and IT managers

Salmon Information Management Implementation Overview

simple.....	.....	.....*complex*
Time		
Now.....	.....Mid-term.....	.....Longer-term
3 to 6 months	*6 to 12 months*	*12 to 24 months*

Authorize **Coordinator & Spatial Information Management Forum**
• Implement Coordinator & Convene Forum
• Connect with Science Panel(s)
• Develop work plan - emphasis on near term deliverables
  • Scorecard Survey
  • SRS Web App
• Focus on key State agency and Tribal systems
• Establish baseline inventory & status through survey
	• Broaden focus - local & federal
	• Recommend grant related info guidelines
	• Recommend Phase I supporting IT standards
	• Leverage cross-agency capabilities
	• Identify additional needs
	• Re-survey to measure progress & adjust emphasis as necessary
		• Broaden focus to multi-state
		• Recommend Phase II supporting standards & guidelines

Authorize **SRS Indicators Web Application** • Identify candidate pilot development activity • Support as necessary • Deploy pilot	• Enhance & Deploy to Priority watershed	• Deploy statewide
Scope **Organizations:** • Selected State and Tribal **Theme:** • Salmon Recovery information systems	• Selected Local & Federal IS • Salmon Recovery	• Multi-state as appropriate • Other Natural Resource related information themes

Salmon Information Management Implementation Overview
'Now'

relatively simple.....

Time

Now.....

3 to 6 months

Authorize **Coordinator & Technical Workgroup**

- Implement Coordinator & Convene Forum
- Connect with Science Panel(s)
- Develop work plan - emphasis on near term deliverables
  - Roll-out and administer Scorecard Survey
  - Scorecard Indicator Web App - id pilot activity
- Focus on key State agency and Tribal systems
- Establish baseline inventory & status through survey

Scope

Organizations:

- Selected State and Tribal Data Resources

Theme:

- Salmon Recovery Scorecard information systems

Salmon Information Management Implementation Overview
Mid-term

.....more complex.....

.....Mid-term.....

6 to 12 months

Coordinator/Technical Workgroup

- Update Tactical Plan - Broaden focus to local & federal
- Recommend grant related info guidelines
- Recommend Phase I supporting IT standards
- Leverage cross-agency capabilities
- Identify and prioritize additional needs
- Re-survey to measure progress & adjust emphasis as necessary

Scorecard Web Application

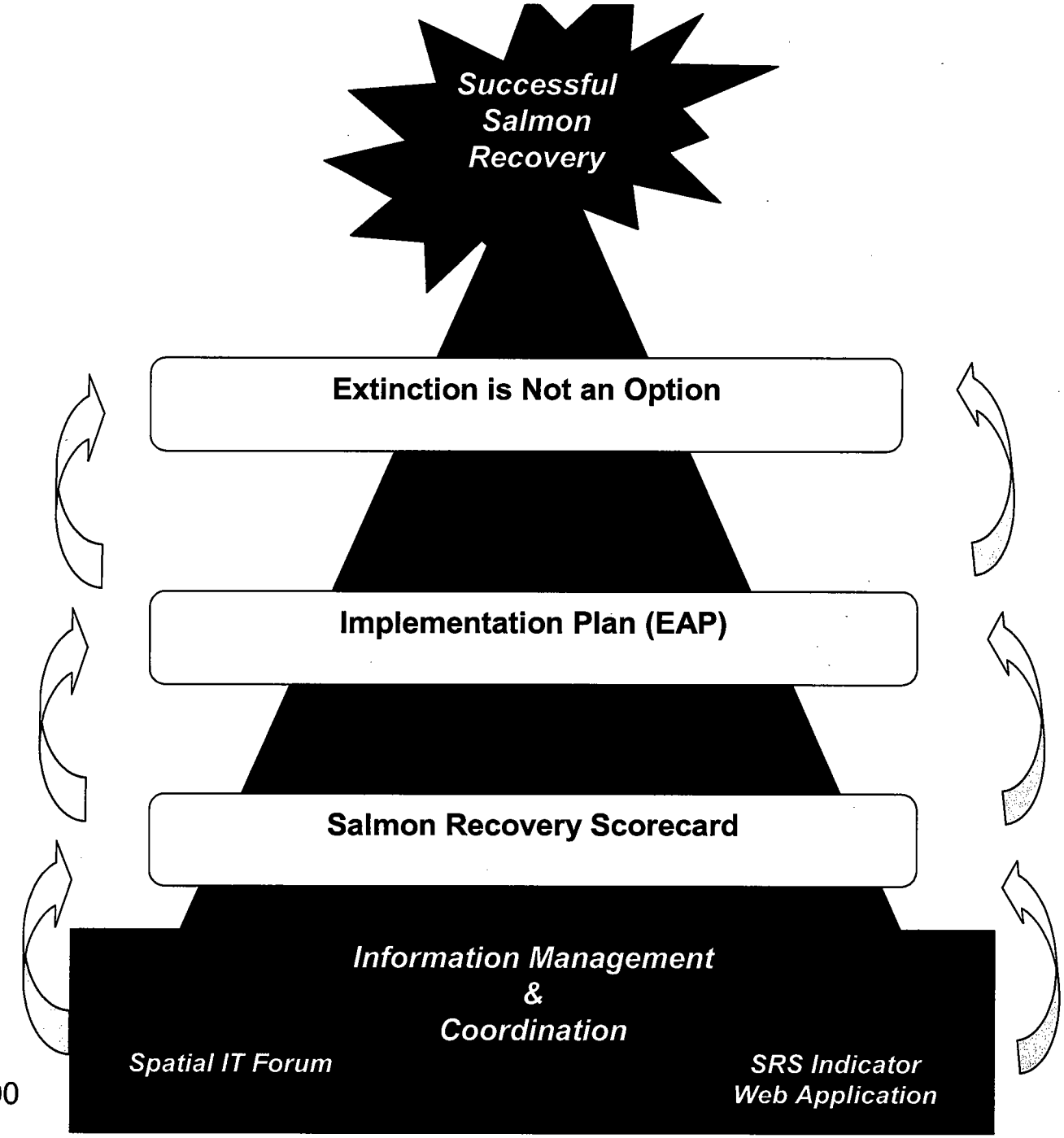
- Enhance & Deploy to Priority watershed

Scope

- Selected Local & Federal IS
- Salmon Recovery

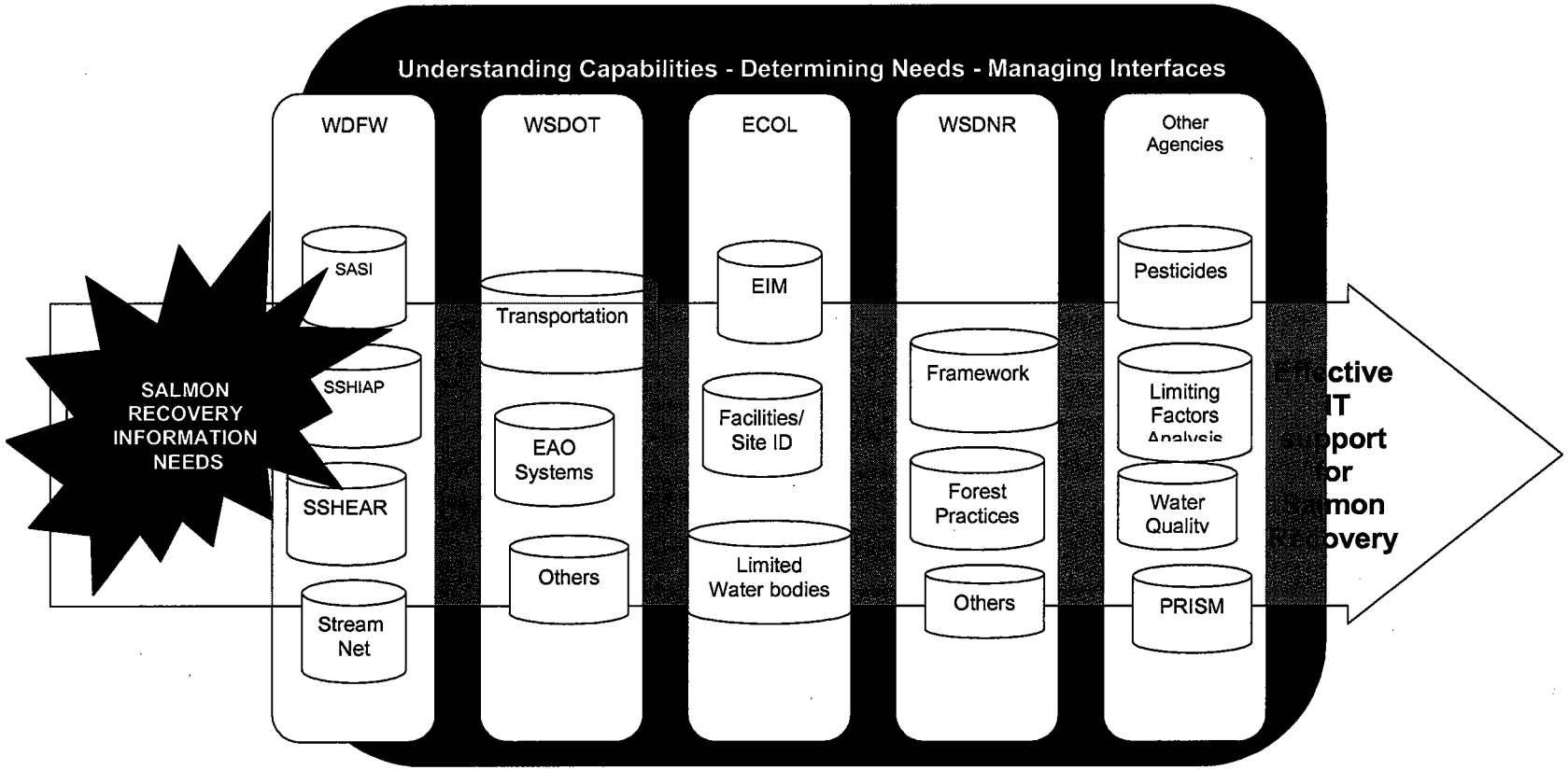
SIM Adds Value

- SIM promotes coordinated application of agency IT to salmon recovery - <u>completes foundation -</u> scientist still enjoy data sovereignty
- Collaborative alignment of agency's IT and SR- Leverage existing IT capabilities, identify/address critical missing elements
- Approach leads to sharable, non-redundant infrastructure and <u>long-term capacity</u>


Successful Salmon Recovery
Extinction is Not an Option
Implementation Plan (EAP)
Salmon Recovery Scorecard
Information Management & Coordination
Spatial IT Forum
SRS Indicator Web Application

June, 2000

Coordinating Our IT Resources Cross Agencies to Support Salmon Recovery



Seeking JNRC Approval & Commitment

Make cross-agency information integration a key SR consideration

- *Joint funding for SIM Coordinator period ($15,000/yr from six agencies + FTE)*
- *Appoint and support your agency's participation in SIM Technical Workgroup (hosted by WAGIC)*
- *Charter Workgroup (workgroup drafts for JNRC approval)*

Salmon Scorecard Information Management Survey

Survey Objectives

- Collect, summarize and maintain information on the inventory and status of data resources that are important to salmon recovery
  - *Identifying Data Resources,*
  - *Assessing 'Status' &*
  - *Identifying Unmet Data Needs*

Purpose

- Create reporting process about data resources important to salmon recovery
  - establish ‘status’ baseline
  - periodically update information

Approach

- Phased Approach
  - *Phase I - Scorecard Agencies*
  - *Phase II - Selected Local & Federal orgs*
  - *Phase III - Larger Community*
- Target Perspectives
  - *Scorecard Indicator Data Leads*
  - *Data Owners*
  - *Data Users*

Criteria

- Integration
- Accessibility
- Usability
- Importance
- Technical
- Geographic Extent
- Temporal Extent
- Data Currency
- Geographic Accuracy

Target Timelines

- Develop Survey & Test - June-July,2000
- Develop Web delivery - July, 2000
- Phase I Survey - August, 2000
- Phase I Results - Sept, 2000