



Status Update: Salado Salamander's Critical Habitat Designation and Species Status Assessment

November 17th, 2021

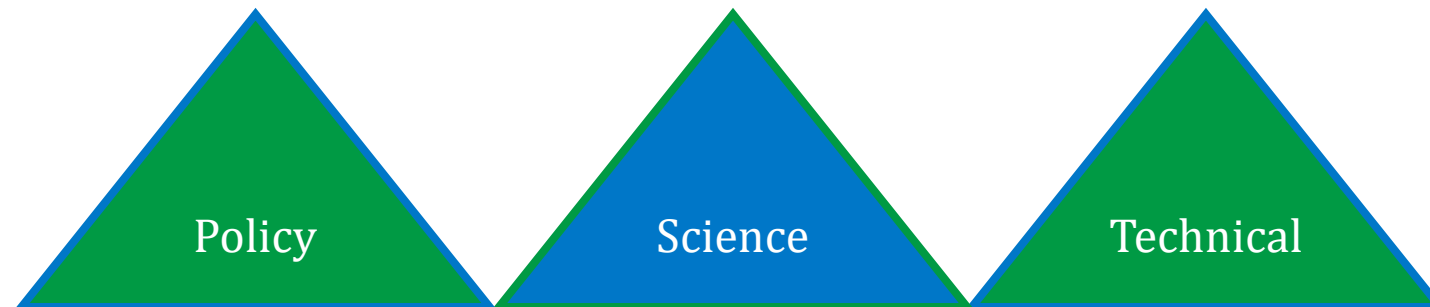


Background

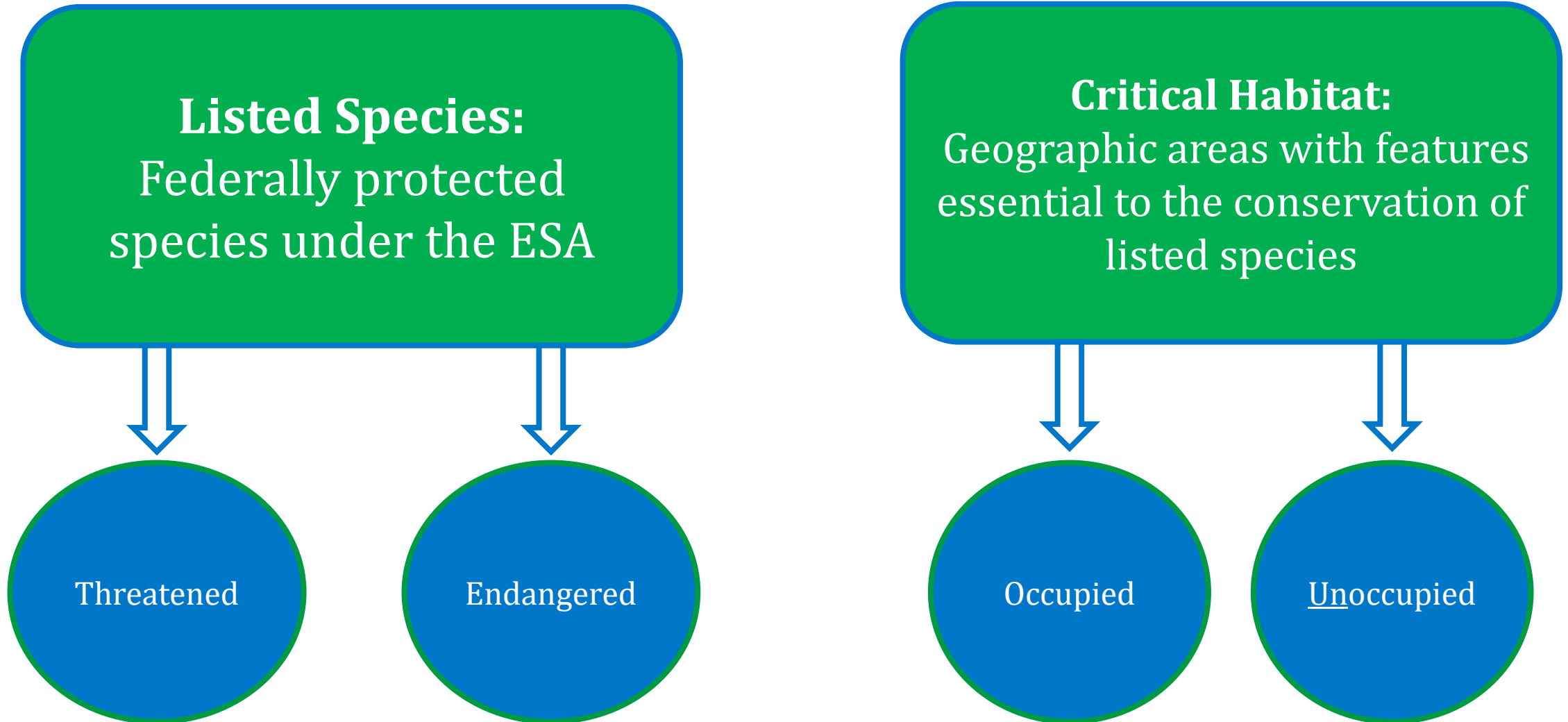


Who We Are

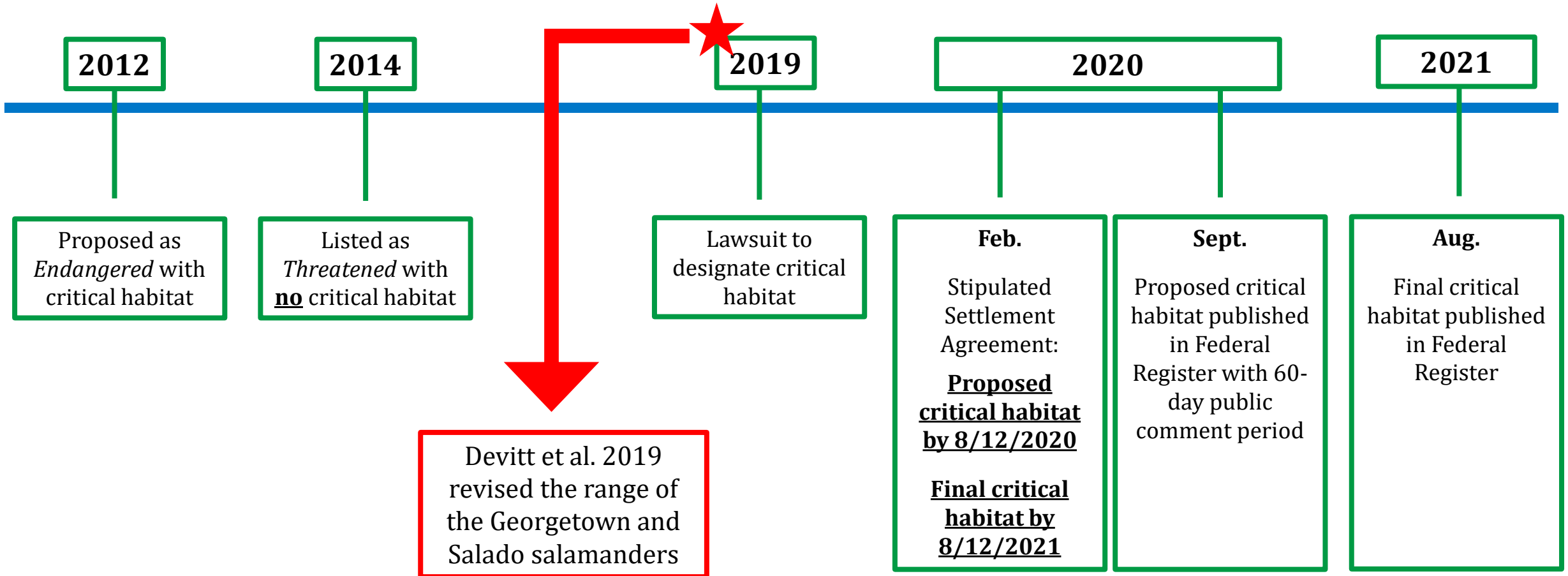
- ❖ Natural resource and environmental consulting firm specializing in regulatory and non-regulatory processes regarding the Endangered Species Act (ESA).
- ❖ Offices in Gatesville (Coryell County) and Austin, Texas.
- ❖ **Co-Founder and President:** Steve Manning.
- ❖ **Project Manager:** Madelyn Todd.



Useful Terms

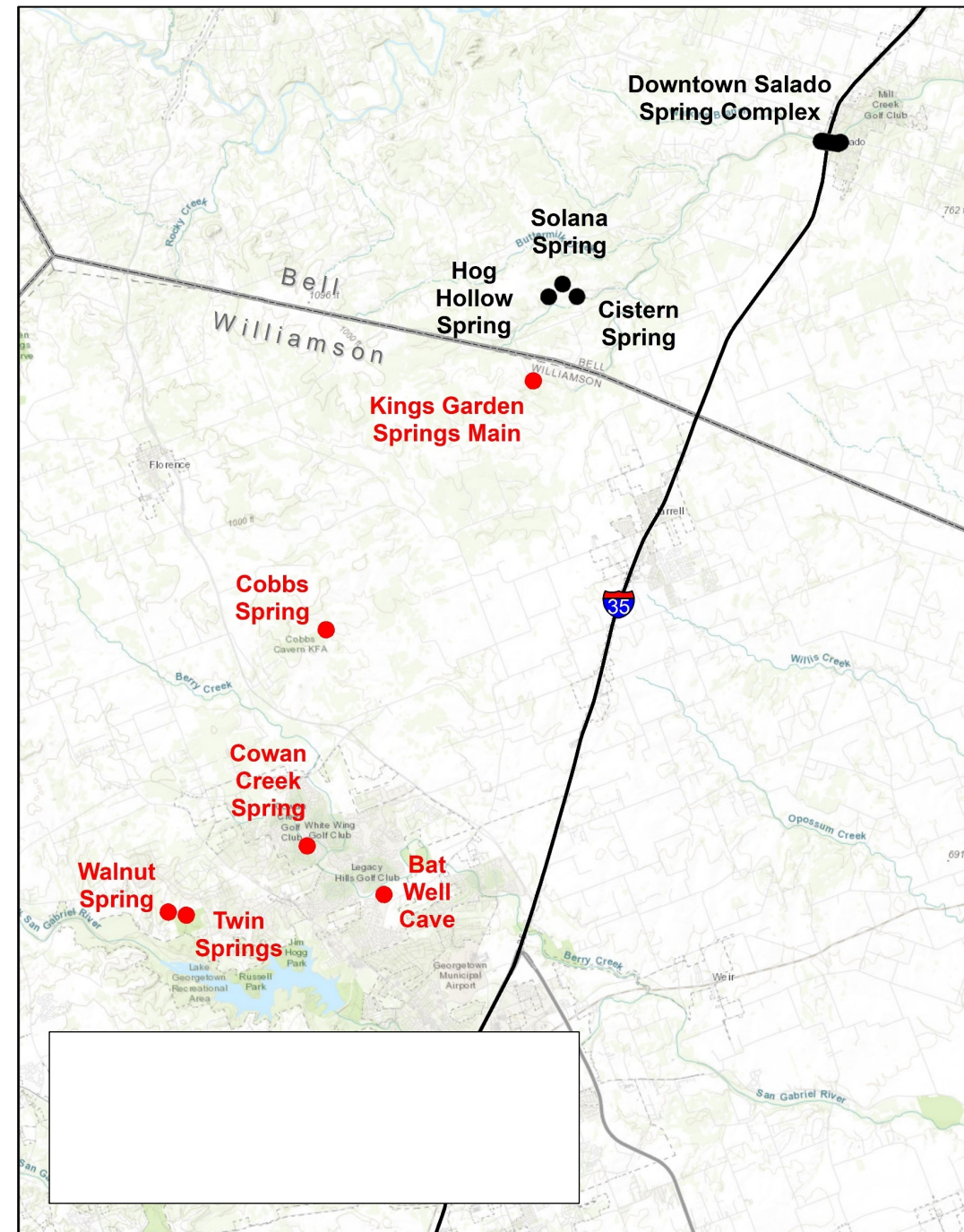


Salado Salamander Timeline

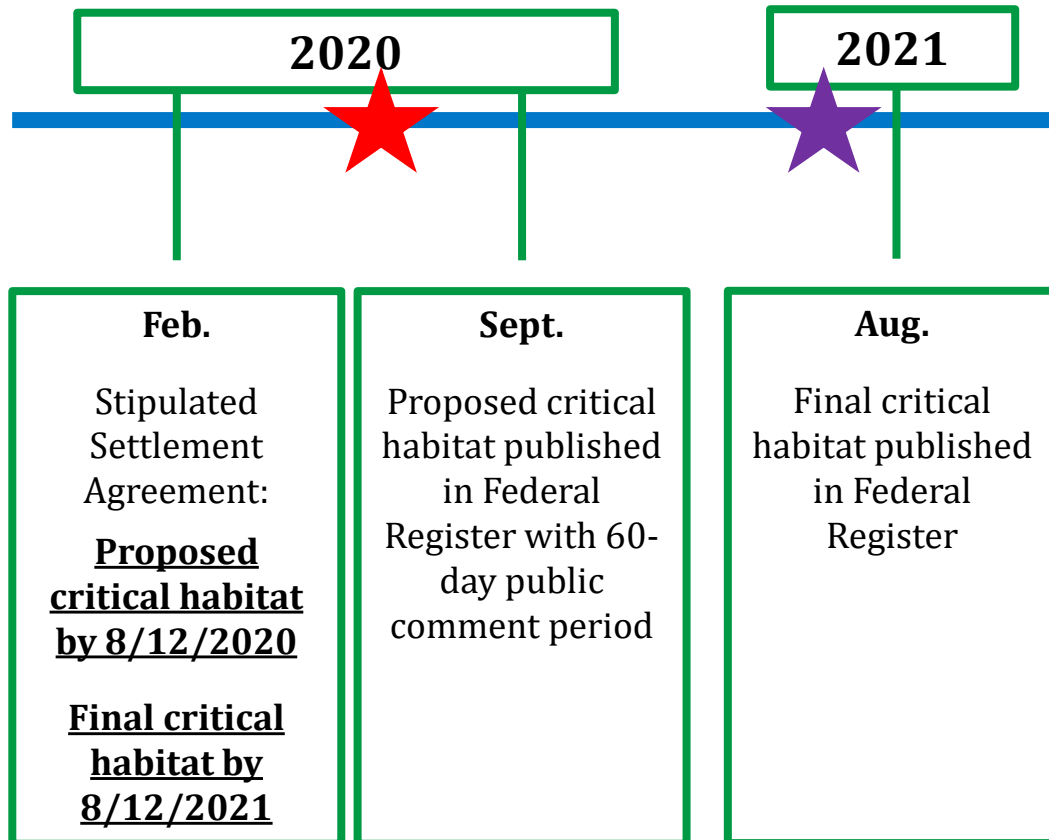


Revised Range

- ❖ Original Salado salamander spring sites were limited to Bell County (black).
- ❖ Several Georgetown salamander spring sites in Williamson County were reclassified as Salado salamander sites due to new genetic research (red).



NRS Involvement



May 2020

Bell County Adaptive Management Coalition (Coalition) contracted NRS to provide accurate and defensible information for the U.S. Fish and Wildlife Service's (USFWS) designation of critical habitat.

March 2021

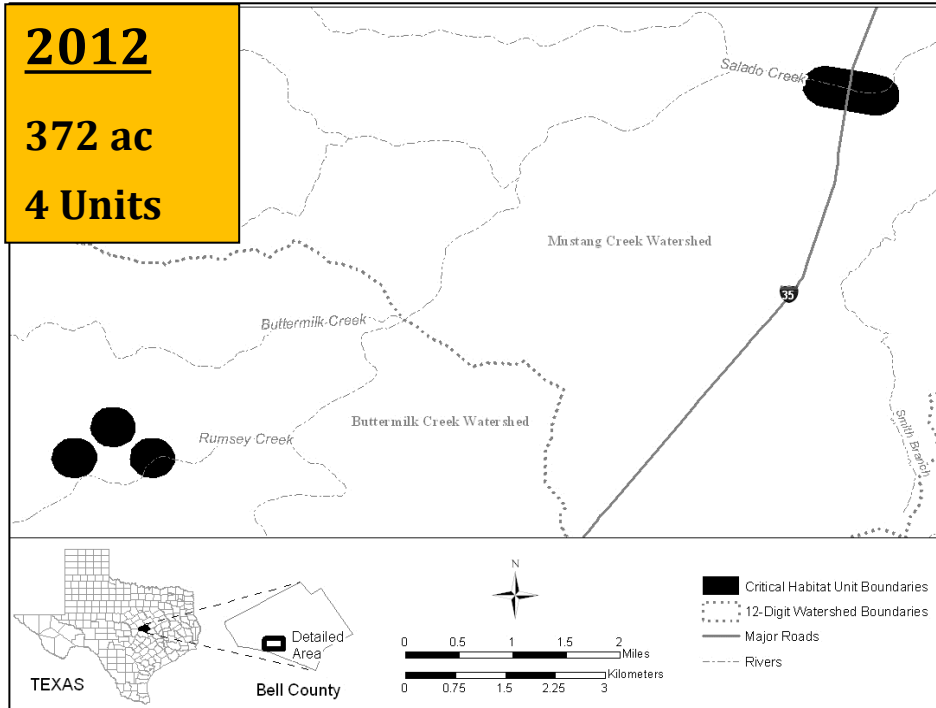
Based on USFWS initiation of a Species Status Assessment (SSA), contract was amended to include SSA-related services.



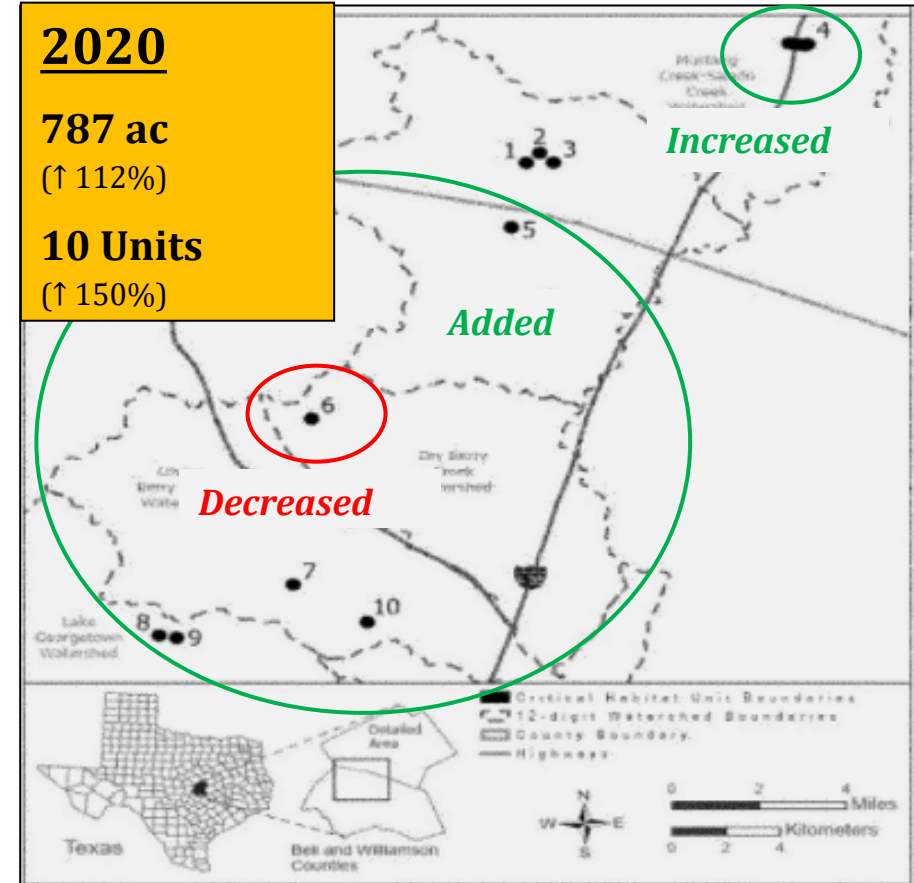
Designation of Critical Habitat



Proposed Critical Habitat

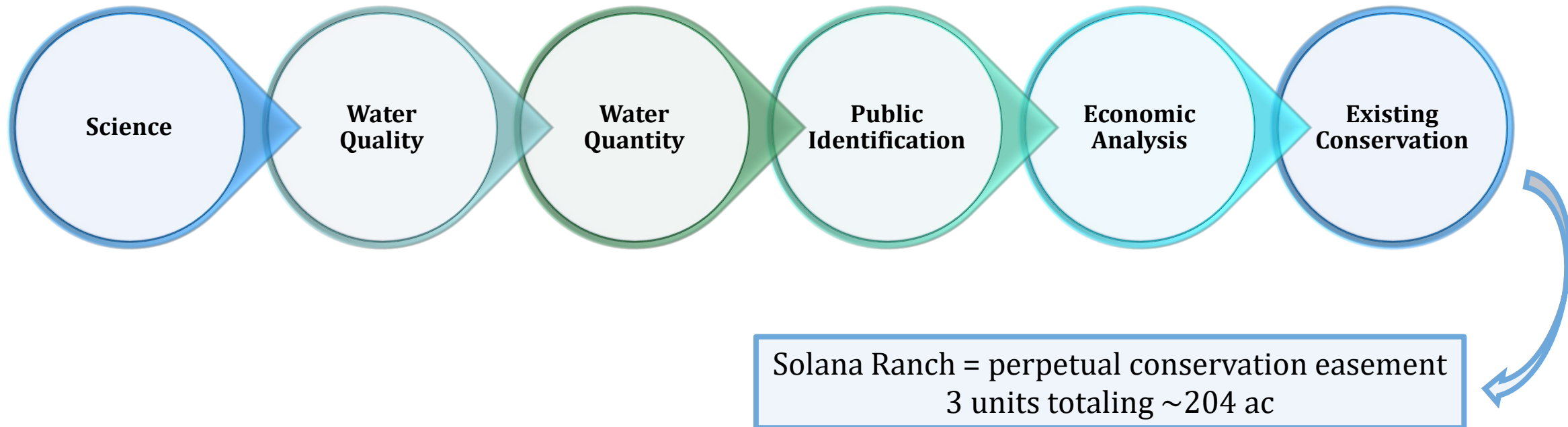


Unit 1. Hog Hollow Spring	68 ac
Unit 2. Solana Spring #1	68 ac
Unit 3. Cistern Spring	68 ac
Unit 4. IH-35	168 ac



Unit 1. Hog Hollow Spring	68 ac
Unit 2. Solana Spring	68 ac
Unit 3. Cistern Spring	68 ac
Unit 4. IH-35	175 ac (↑ 7 ac)
Unit 5. King's Garden Main Spring	68 ac
Unit 6. Cobbs Spring	68 ac (↓ 15 ac)
Unit 7. Cowan Creek Spring	68 ac
Unit 8. Walnut Spring	68 ac
Unit 9. Twin Springs	68 ac
Unit 10. Bat Well Cave	68 ac

Public Comment Period

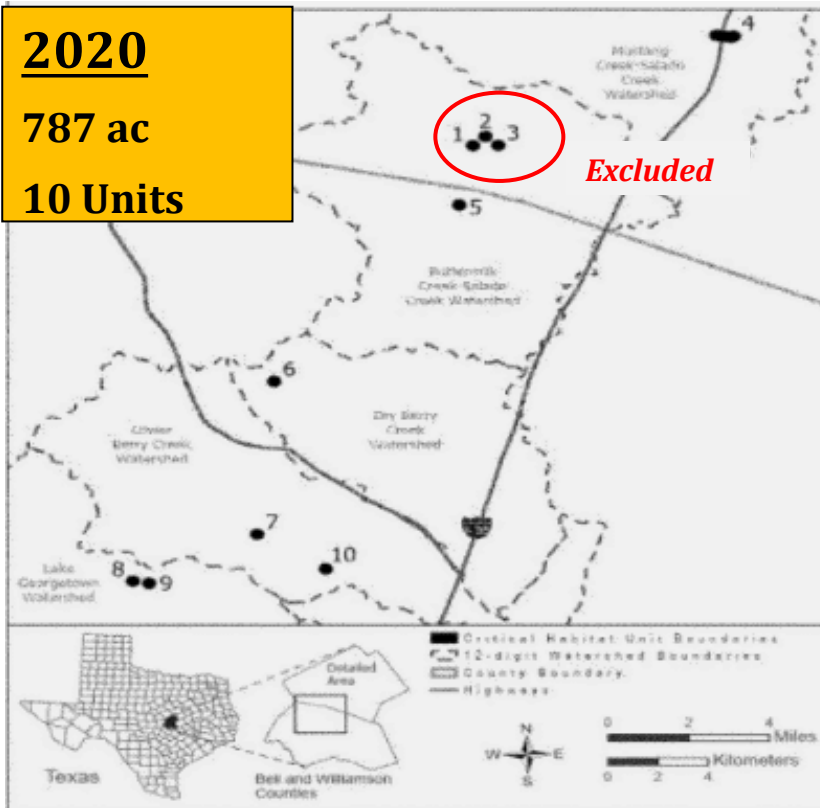


Final Critical Habitat

2020

787 ac

10 Units



Unit 1. Hog Hollow Spring	68 ac
Unit 2. Solana Spring	68 ac
Unit 3. Cistern Spring	68 ac
Unit 4. IH-35	175 ac
Unit 5. King's Garden Main Spring	68 ac
Unit 6. Cobbs Spring	68 ac
Unit 7. Cowan Creek Spring	68 ac
Unit 8. Walnut Spring	68 ac
Unit 9. Twin Springs	68 ac
Unit 10. Bat Well Cave	68 ac

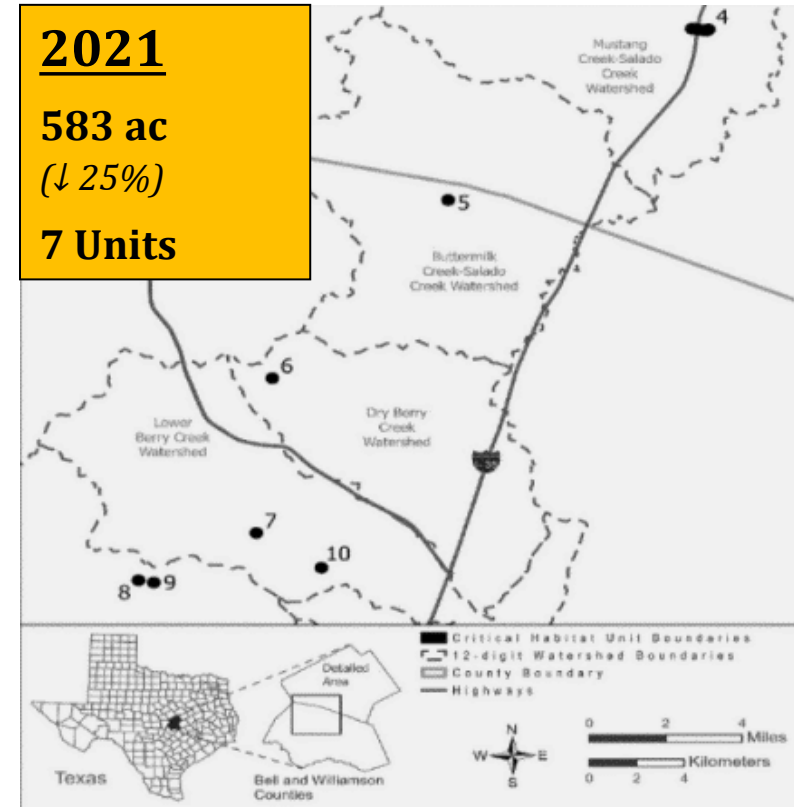
"Final rule incorporates changes to our proposed rule based on comments received...we (Service) exclude three critical habitat units for the Salado salamander, totaling approximately 204 ac (Solana Ranch)."

2021

583 ac

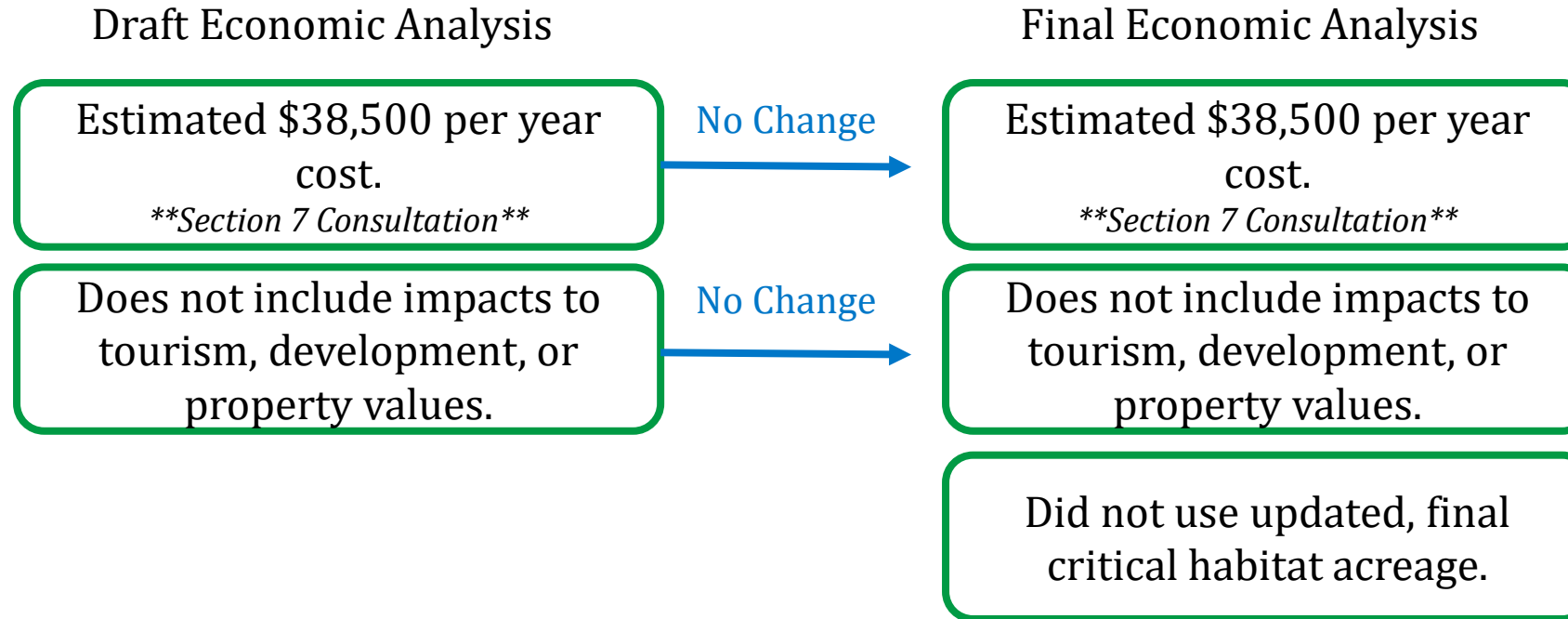
(↓ 25%)

7 Units



Unit 4. IH-35	175 ac
Unit 5. King's Garden Main Spring	68 ac
Unit 6. Cobbs Spring	68 ac
Unit 7. Cowan Creek Spring	68 ac
Unit 8. Walnut Spring	68 ac
Unit 9. Twin Springs	68 ac
Unit 10. Bat Well Cave	68 ac

USFWS Economic Analysis



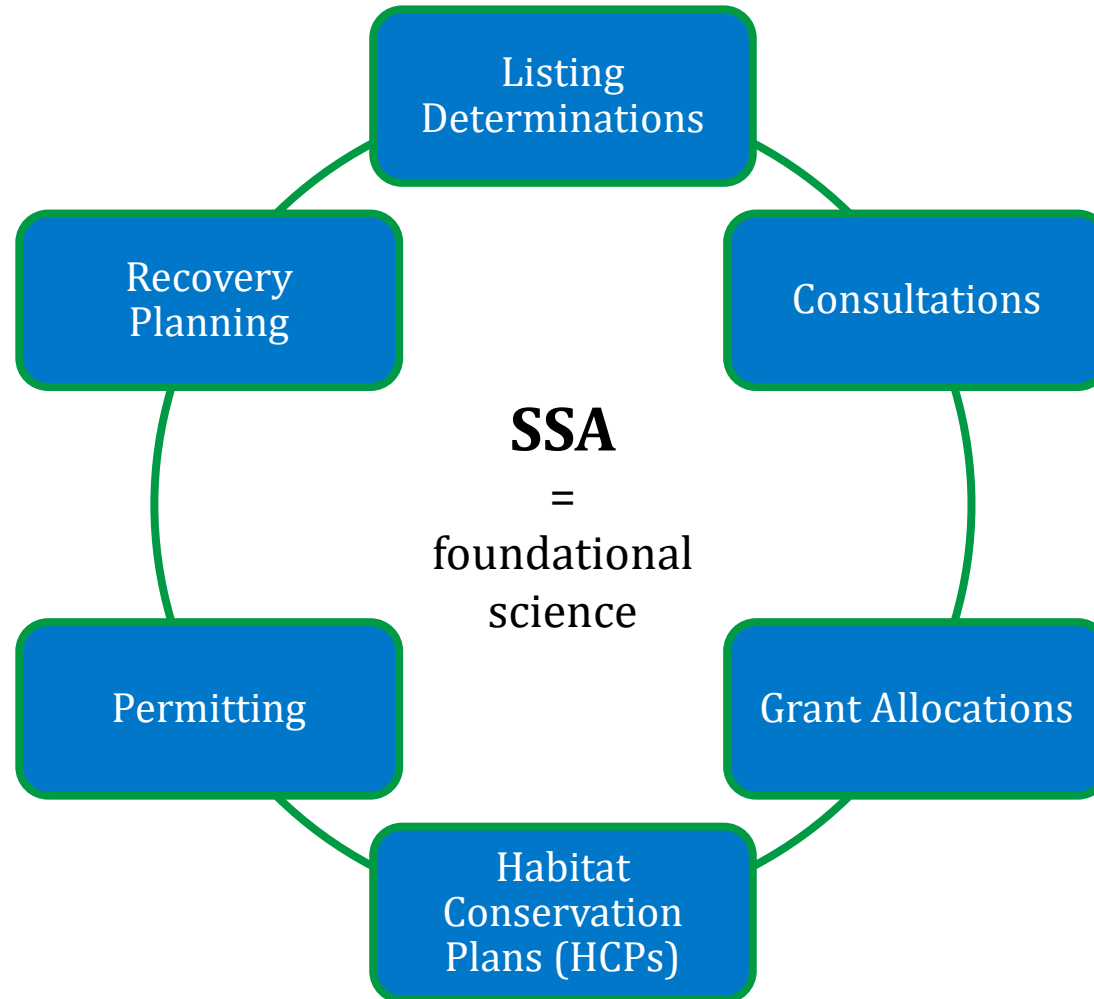
“Designation of critical habitat **may cause developers or landowners to perceive** that private lands will be subject to **use restrictions** or litigation from third parties, **resulting in cost. Data limitations** prevent the quantification of the possible incremental reduction in property values.”



Current USFWS SSA



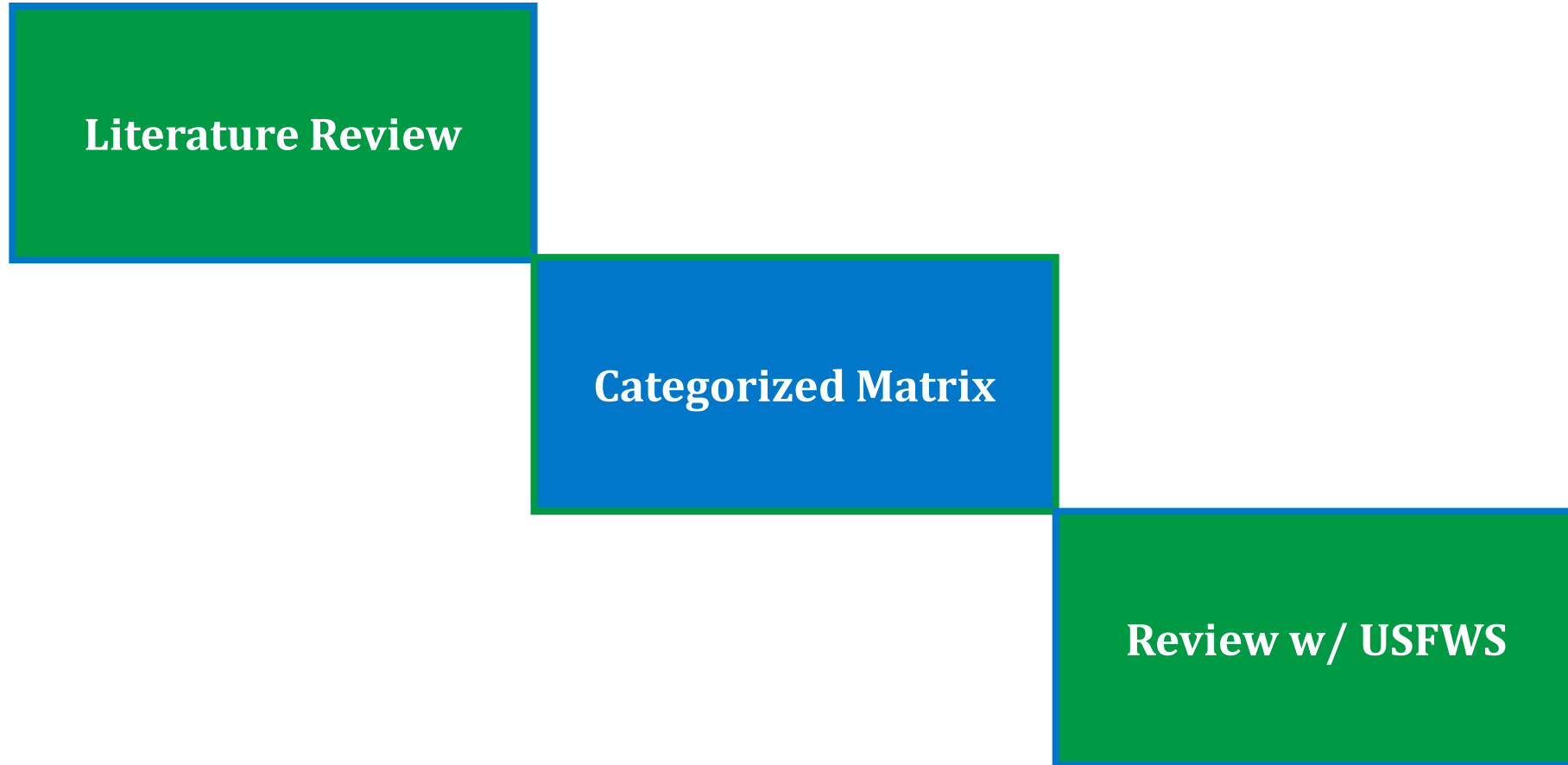
What is an SSA?



Salado salamander's SSA currently ongoing.

Salado Salamander SSA **Stage 1**

Species' Needs 



Salado Salamander SSA **Stage 2**

Current Condition 

**Impervious Cover (IC)
Analyses**

**Population-Based
Correlation**

Review w/ USFWS

What is Impervious Cover?

IC

=

Any surface that does not
absorb water

Patios

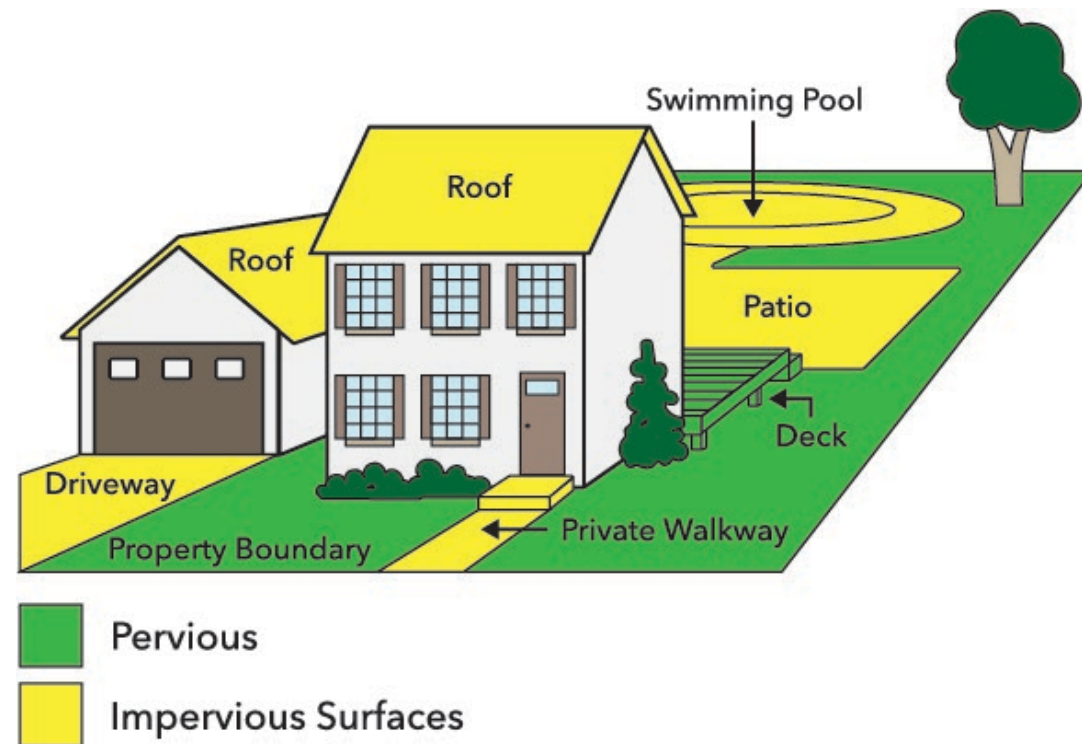
Sidewalks

Parking
Lots

Stone

Rooftops

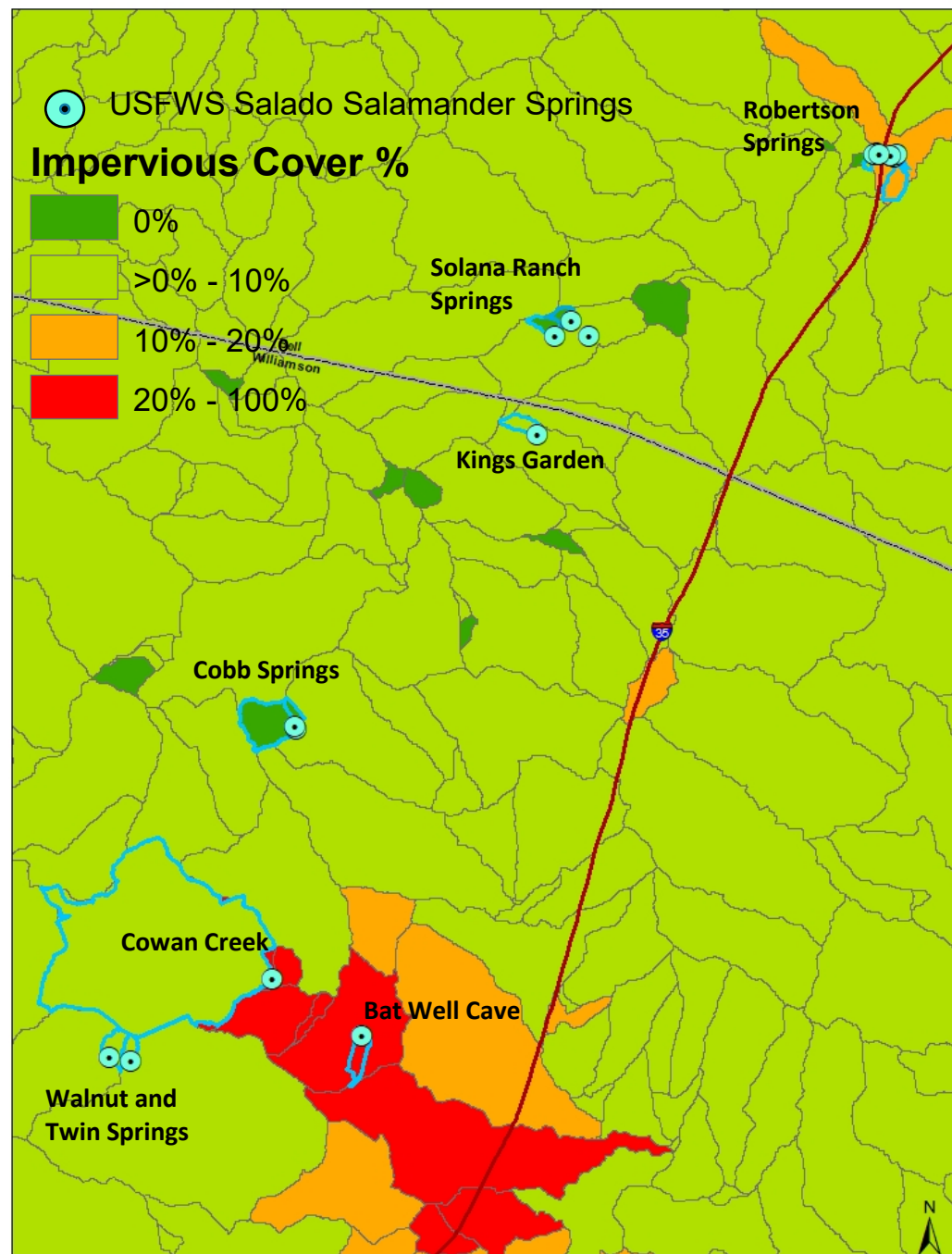
Roadways



Bell and Williamson Counties Surface Watersheds

2019 iSAT Analysis

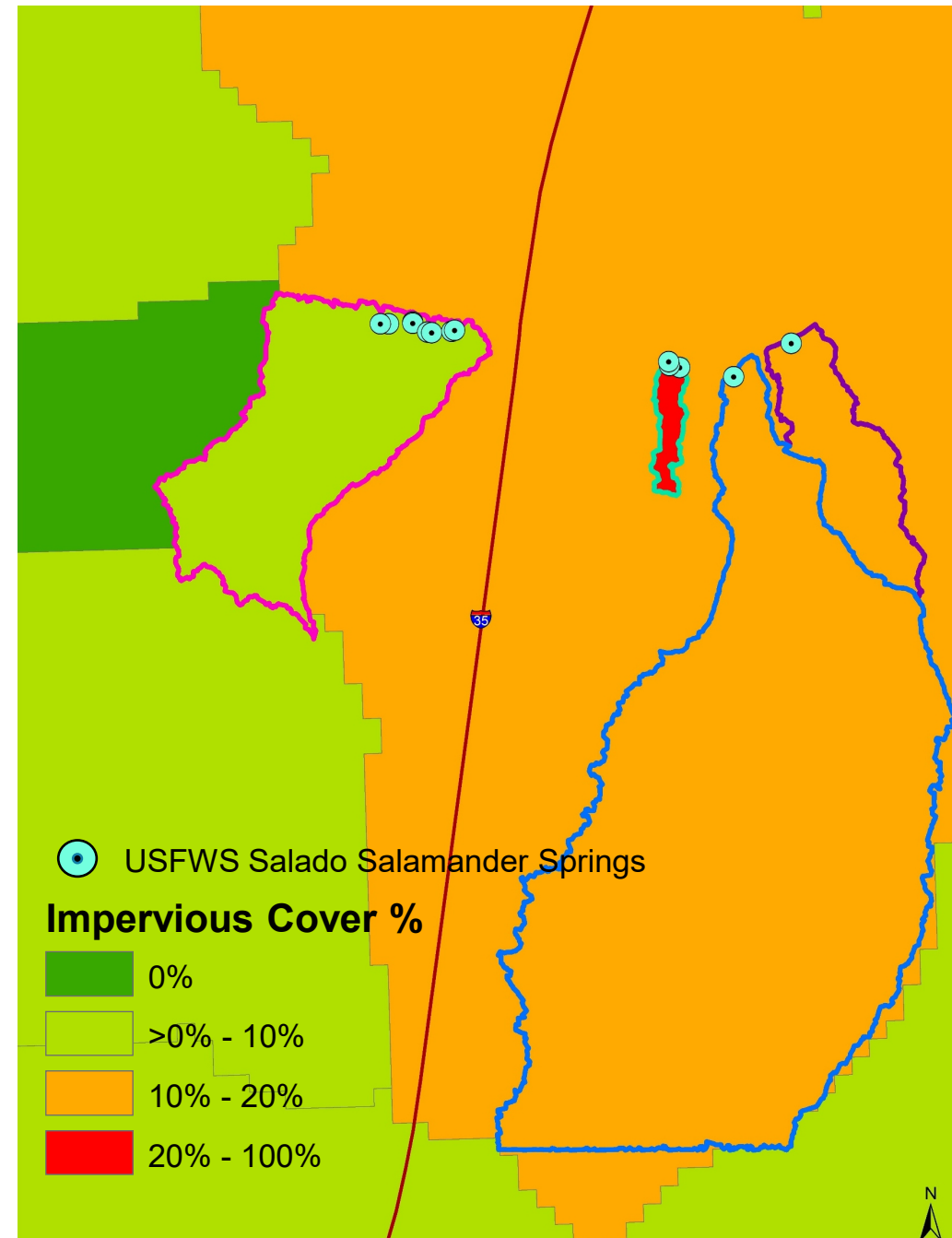
Watershed	Acres Analyzed (ac)	2019 Percent Impervious (%)
Robertson Springs	36.2	0.1
Side Spring	0	0
Little Bubbly/ Big Boiling	2.3	62
Lazy Days Fish Farm	146.2	15.5
Anderson Spring	13.1	18
Hog Hollow	96.3	0
Solana Spring	74.6	0
Cistern Spring	2.3	1.2
Kings Garden	121.7	0.25
Cobb Well / Cobb Spring	461.8	0
Cowan Creek Spring	6,619.70	7.3
Bat Well Cave	134.7	34.3
Walnut Spring	147	4.2
Twin Spring	73.6	8



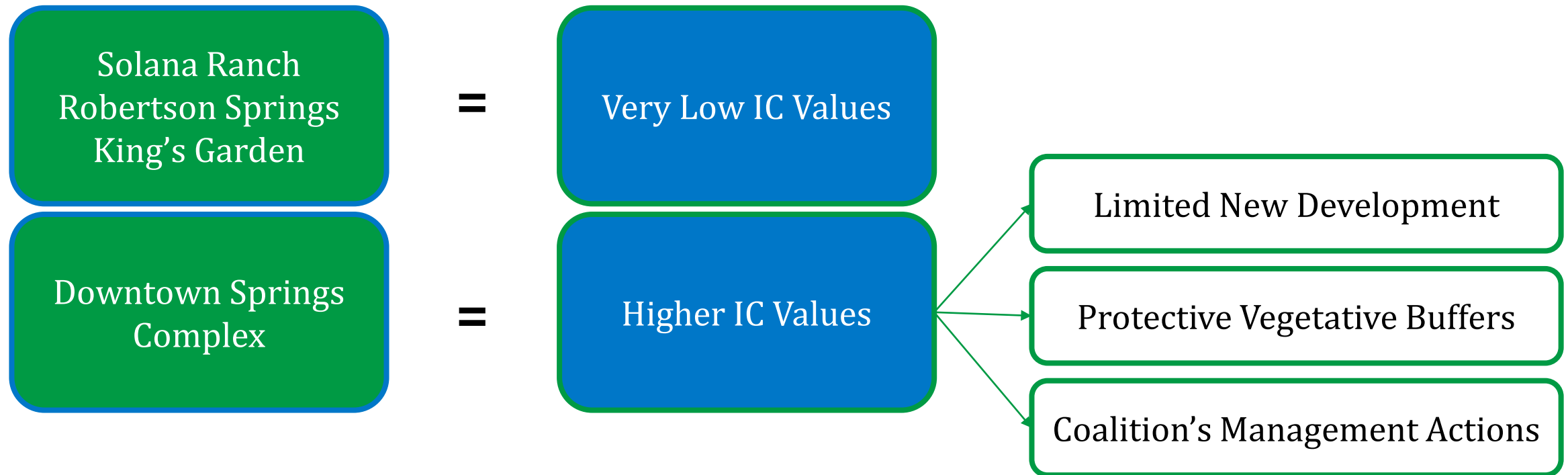
Salado Springs Surface Watersheds

2019 iSAT Analysis

Water Catchment Area	% IC
Robertson Springs (36.3 acres)	>1%
Big Boiling Spring, Lil' Bubbly Spring (2.3 acres)	62 %
Lazy Days Spring (146.2 acres)	16 %
Anderson Spring (13.2 acres)	18 %

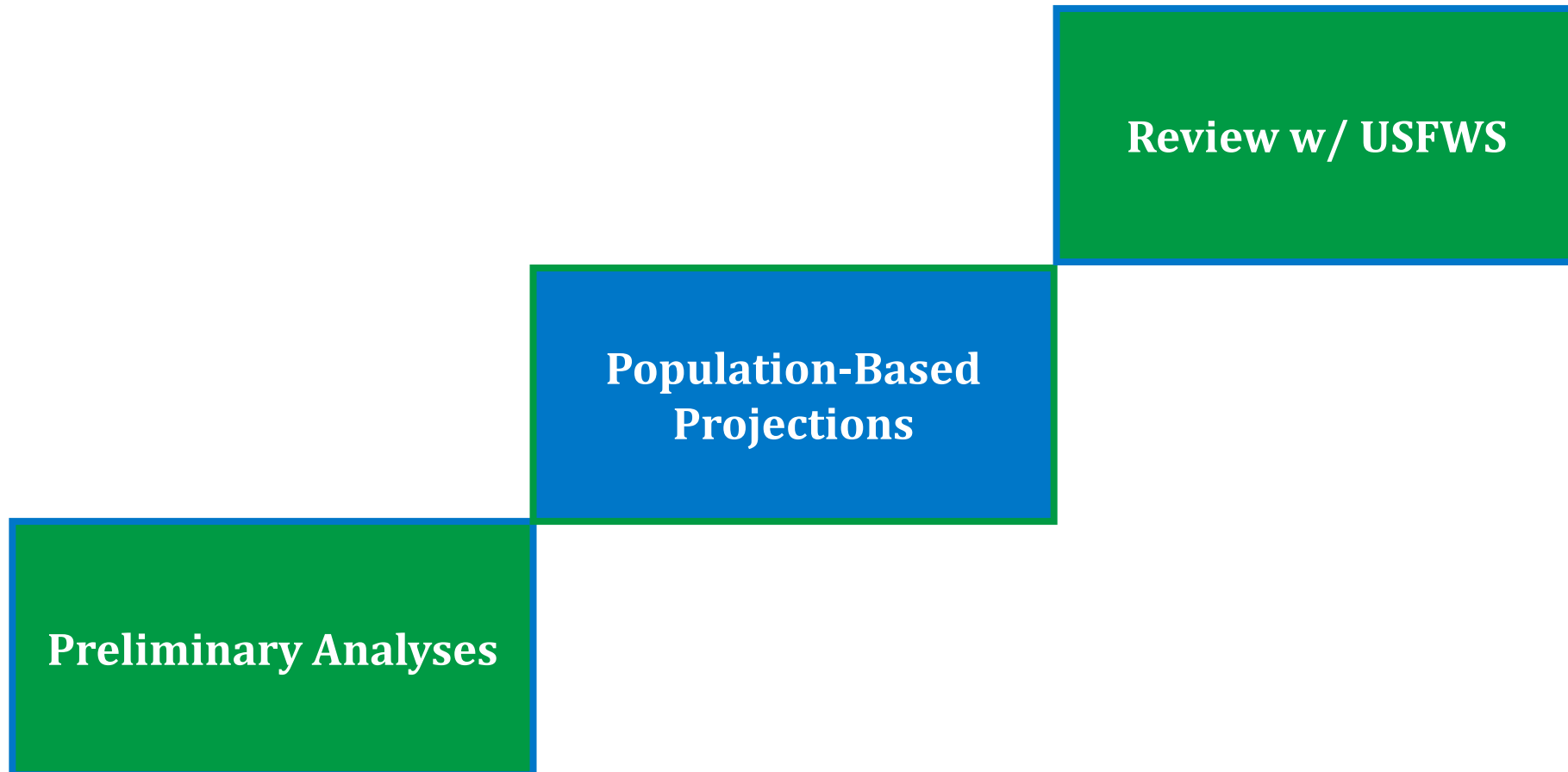


Overview of IC Analysis Results



Salado Salamander SSA **Stage 3**

Future Condition 



Conclusion



Concluding Thoughts

- ❖ NRS has been supporting the Coalition in the regulatory and non-regulatory processes regarding the Salado salamander in Bell County.
- ❖ It is important for the people of Bell County to be well-informed and to have input into these processes.



Thank you.

November 17th, 2021