




The Maine Vernal Pool SAMP  
(something for everyone)

[calhoun@maine.edu](mailto:calhoun@maine.edu), [hertzmaine@gmail.com](mailto:hertzmaine@gmail.com)



- 
- A photograph of a winter forest. The ground is covered in a thick layer of snow. Several evergreen trees are visible, their branches heavily laden with snow. The trees are dark green, contrasting with the white snow. The lighting is soft, suggesting an overcast day. The overall atmosphere is quiet and serene.
- 1. The Pools***
  - 2. The Policy (the challenge)***
  - 3. The People (the solution)***





*Spring: snowmelt and  
rainfall*



*Fall: fill with  
groundwater, reduced ET*

*John Churchman  
Copyright 2012*







# Pool Characteristics

- Small (< 10,000 sq ft)
- No Permanent Inlet/Outlet
- Fishless
- Specialized breeding fauna























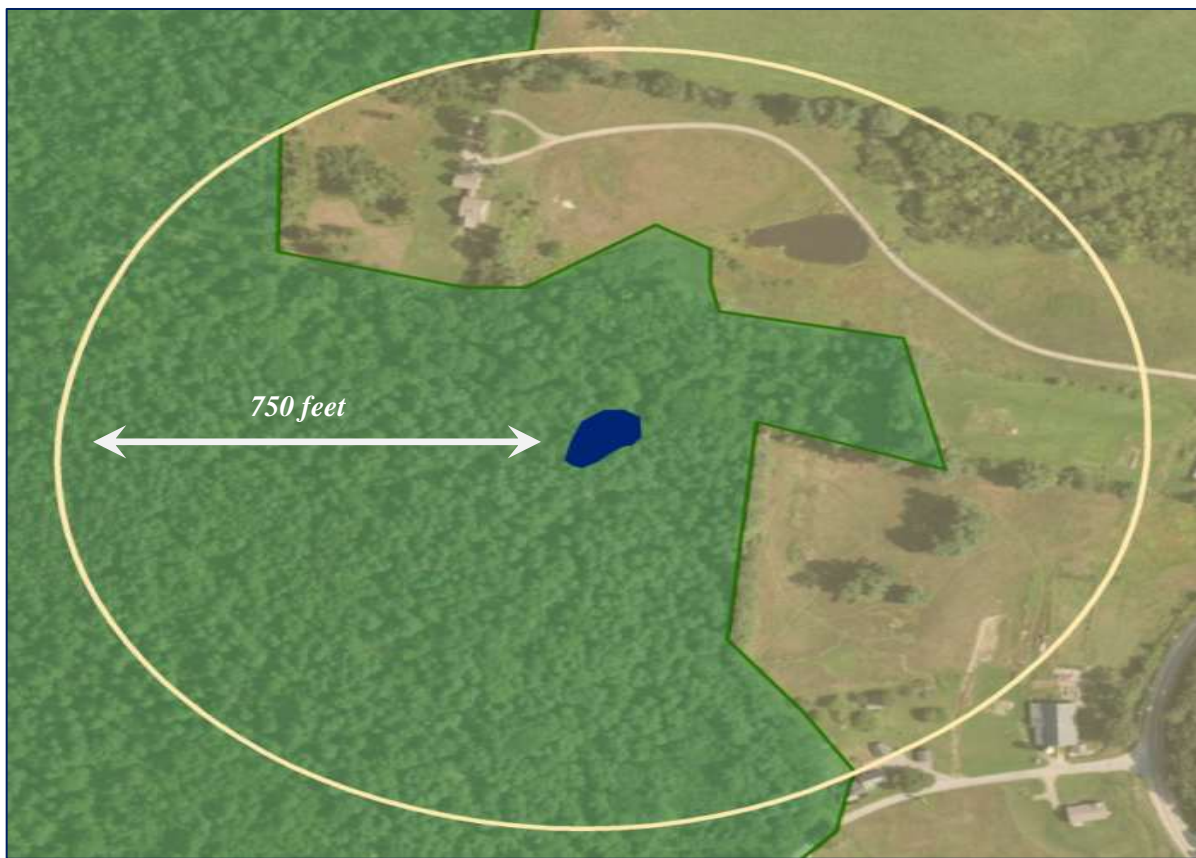


The background of the slide features a series of concentric circles. The innermost circle is a light purple color. Surrounding it are several more circles in shades of blue and green, creating a ripple effect. The outermost area of the slide is a solid dark green color.

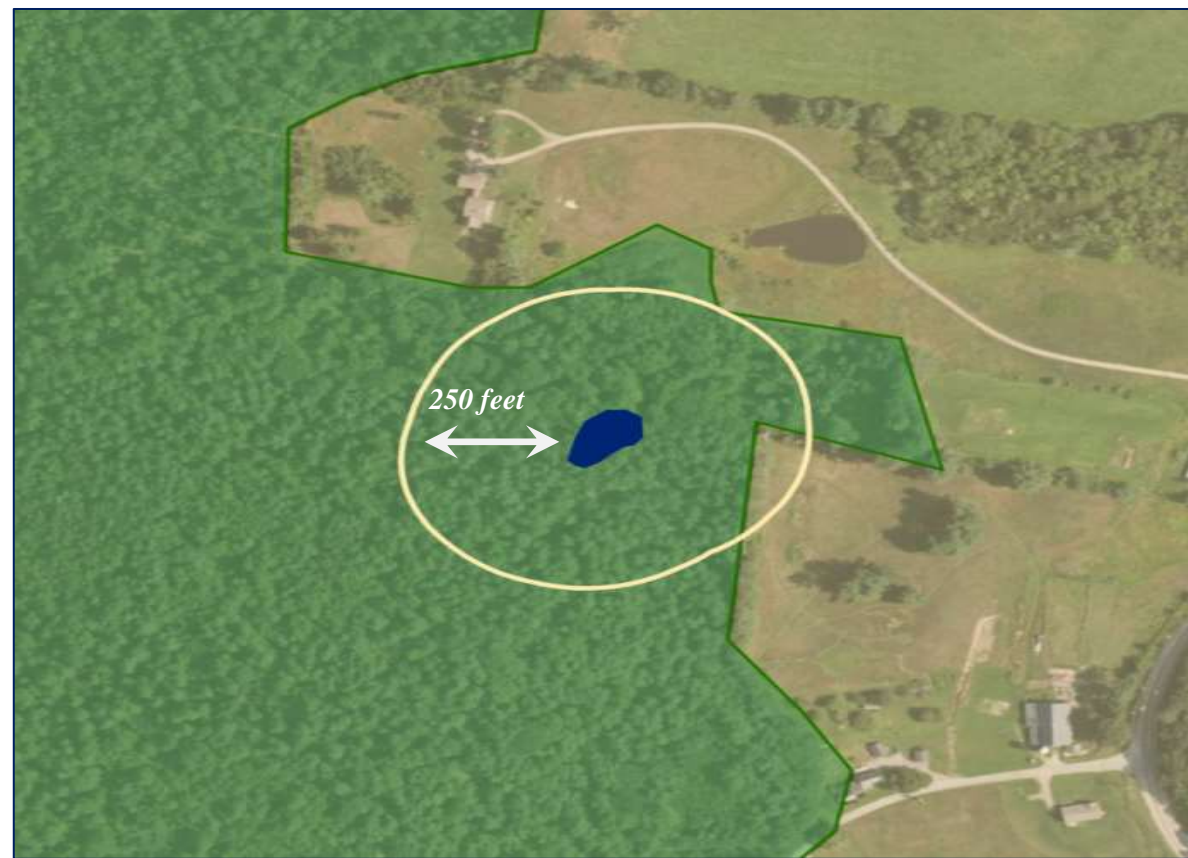
# The Policy



## ***Federal Regulation***



## ***State Regulation***





# Challenges to Protecting Small Pools

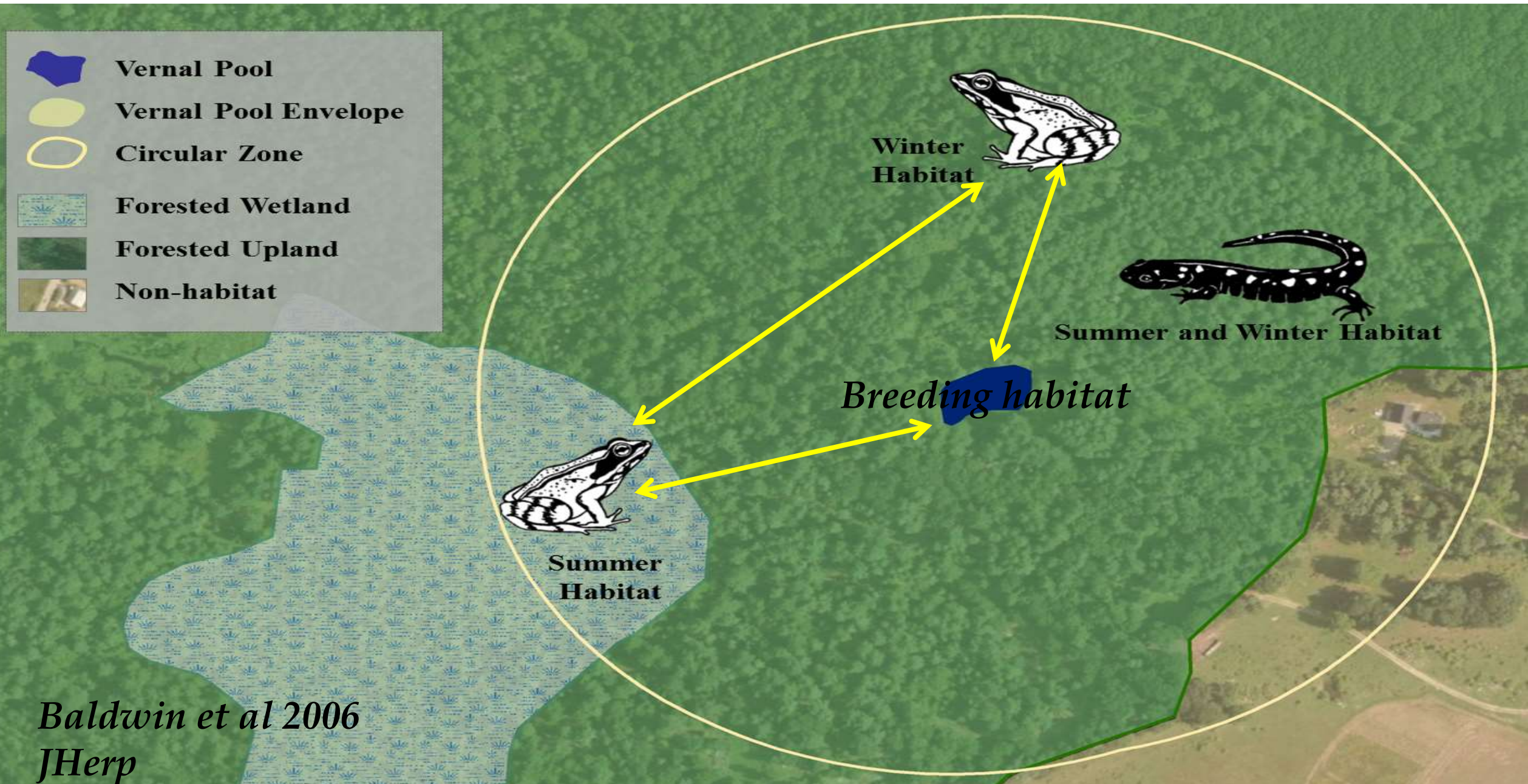
- **Hard to inventory**
- **Pool PLUS forest**
- **Private property**
- **No evident ecosystem services**





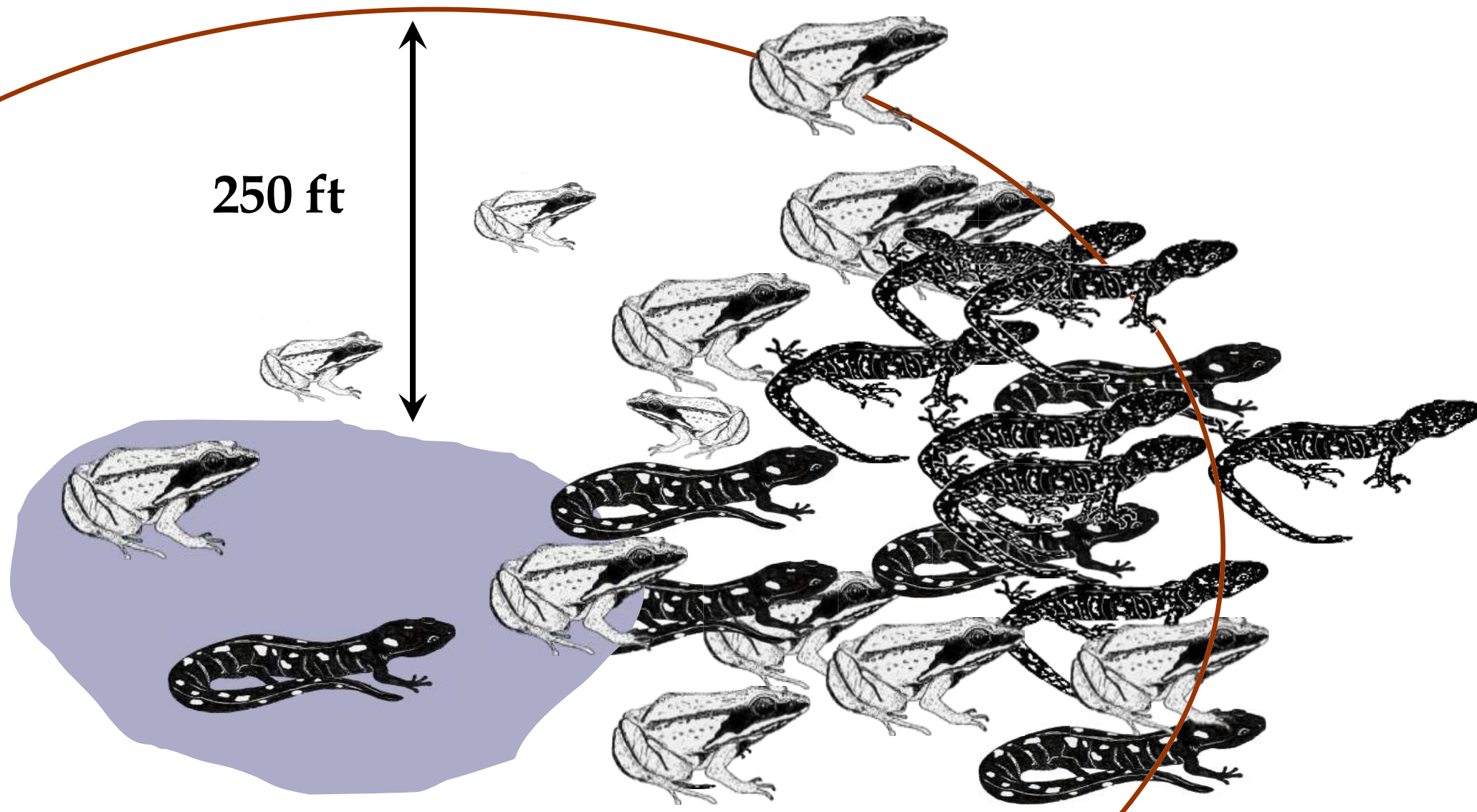


# Complex Life Histories





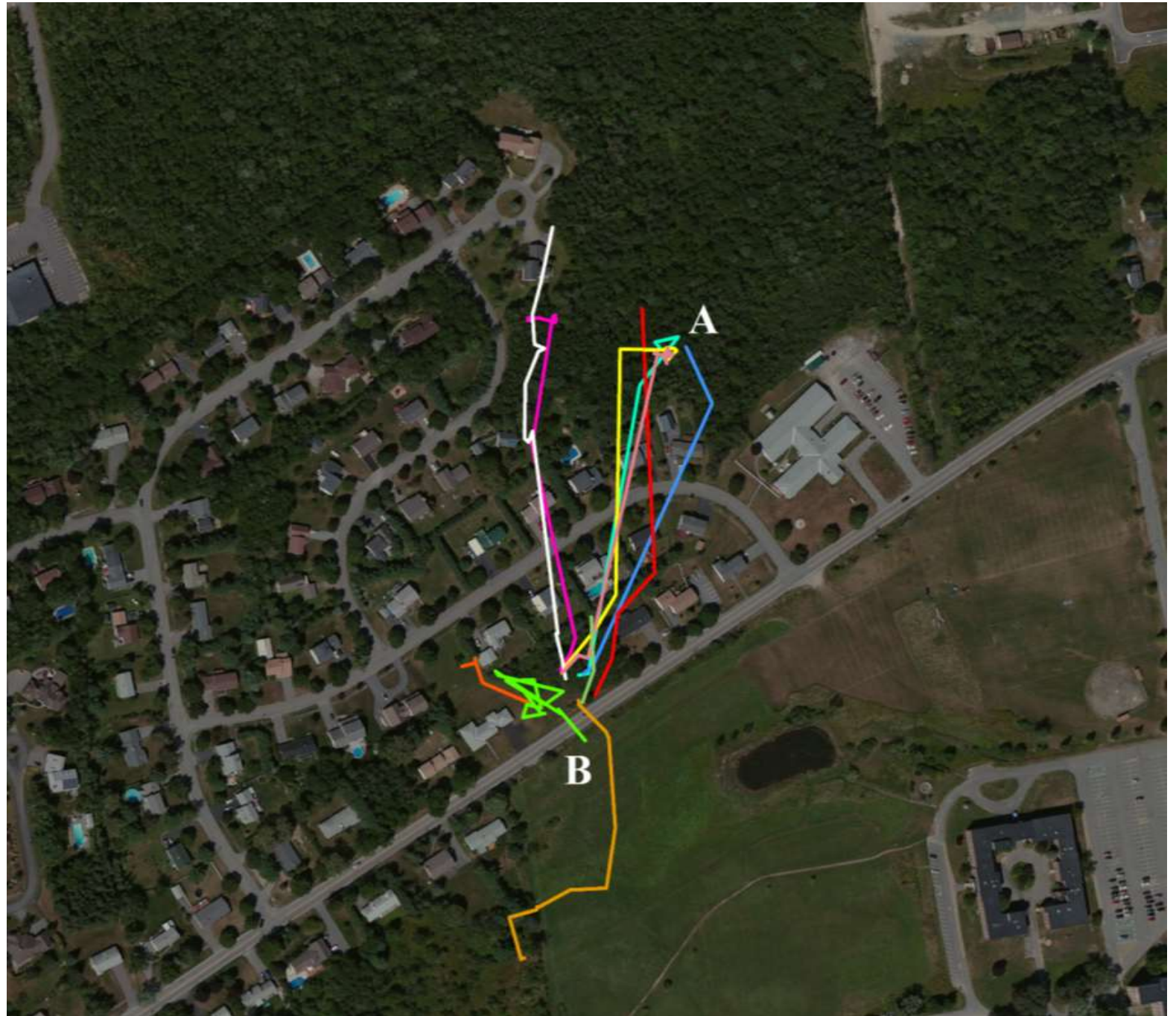
# Challenges to Protecting Pools





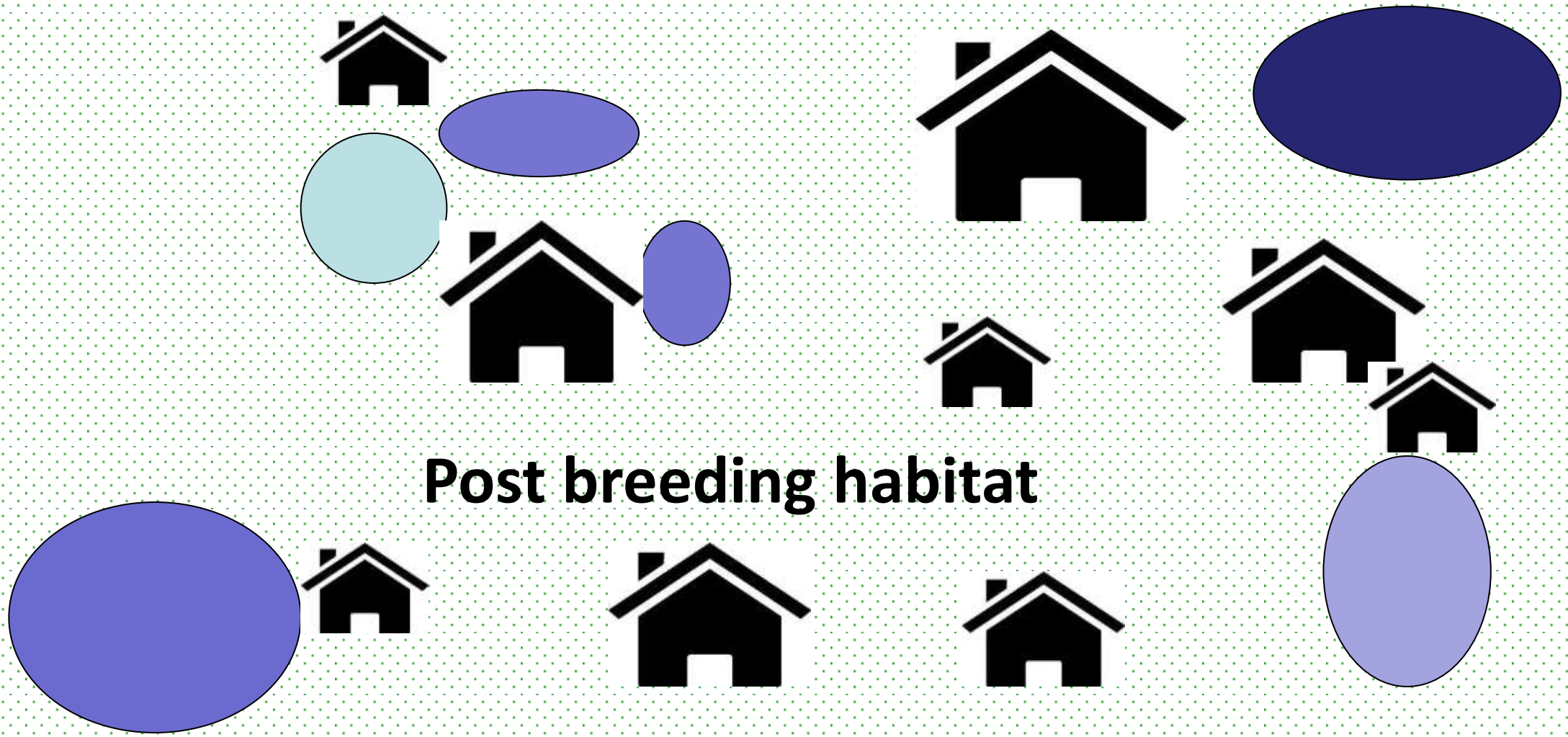


*Lag between  
policy and best  
available science*





# Ghost pools?

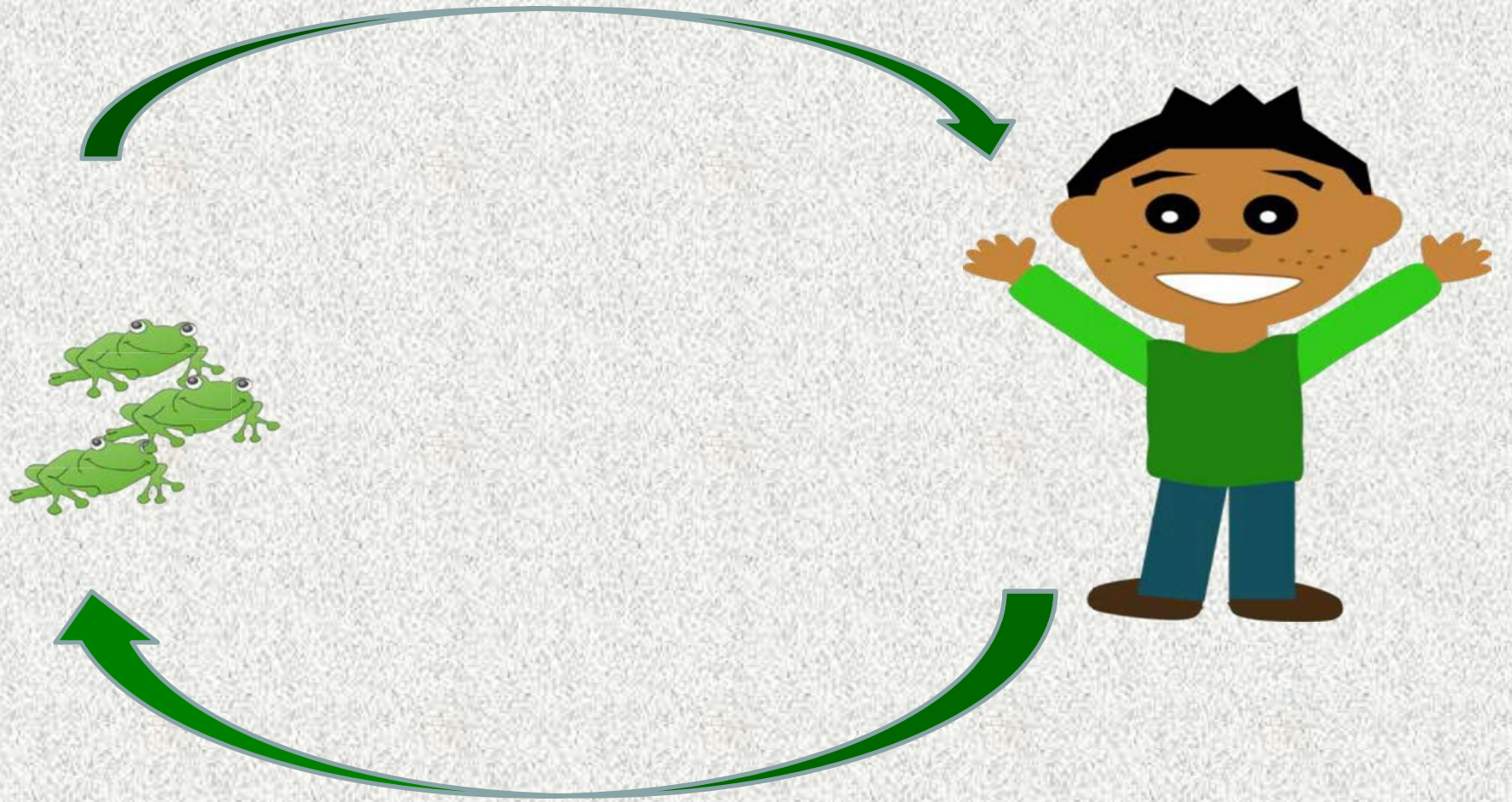




The background of the slide features a series of concentric circles. The outermost circles are a dark green color, while the innermost circle is a light purple color. The text is centered within the light purple circle.

The People  
(*The solution*)





**Wildlife, people , AND ecologically and economically sustainable communities**



# Turning Contention into Collaboration

## Stakeholder solutions





# The Cast of Characters

## Leading roles

- Federal and state regulating agencies
- State planner
- Developers and real estate professionals
- Municipal planners and economic development staff
- Ecologist, biologists: federal, state, University of Maine



# The Cast of Characters

## Supporting roles

- University of Maine economists
- Land trusts



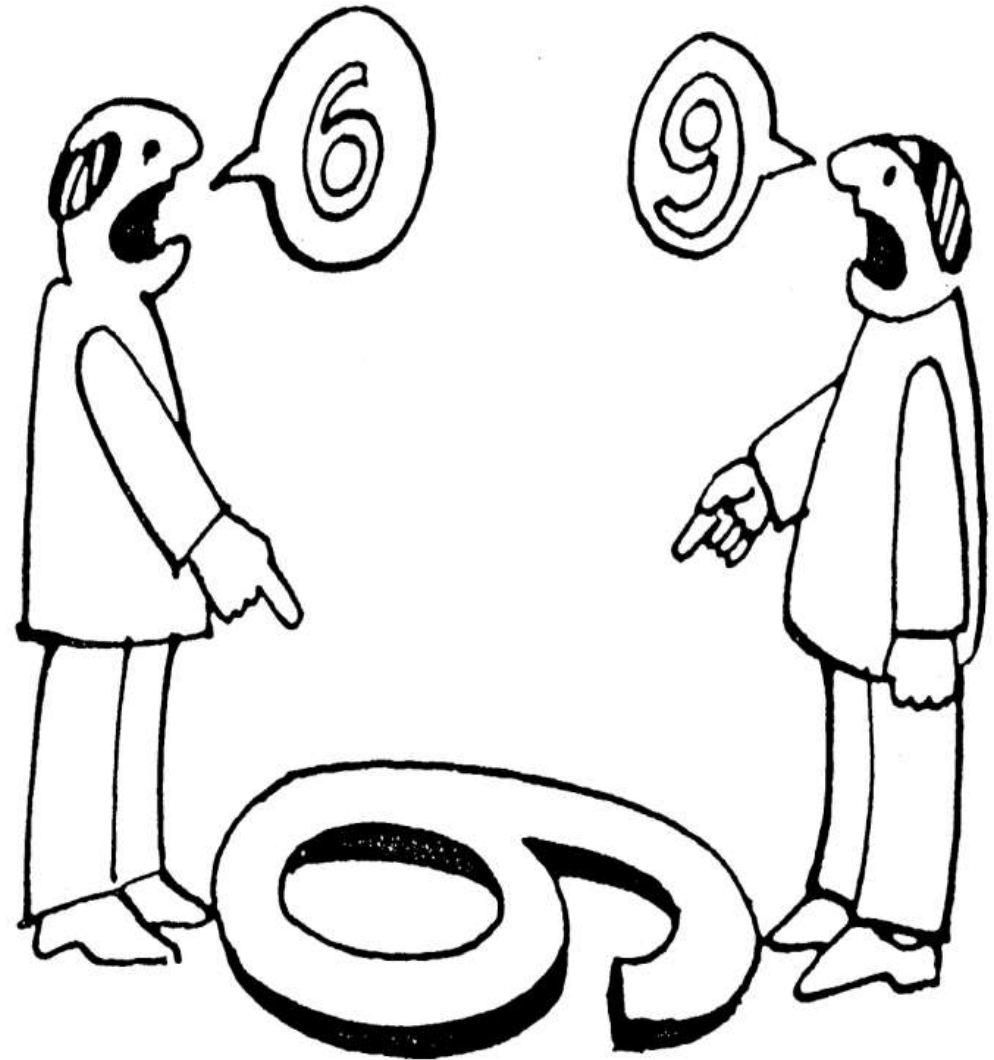
# What is a Vernal Pool?

- Regulating agency
- Developer
- Municipality
- Ecologist
- Statutory responsibility
- Regulated resource
- Depends where it's located
- Unique wetland habitat



# Who's Right?

EVERYONE!





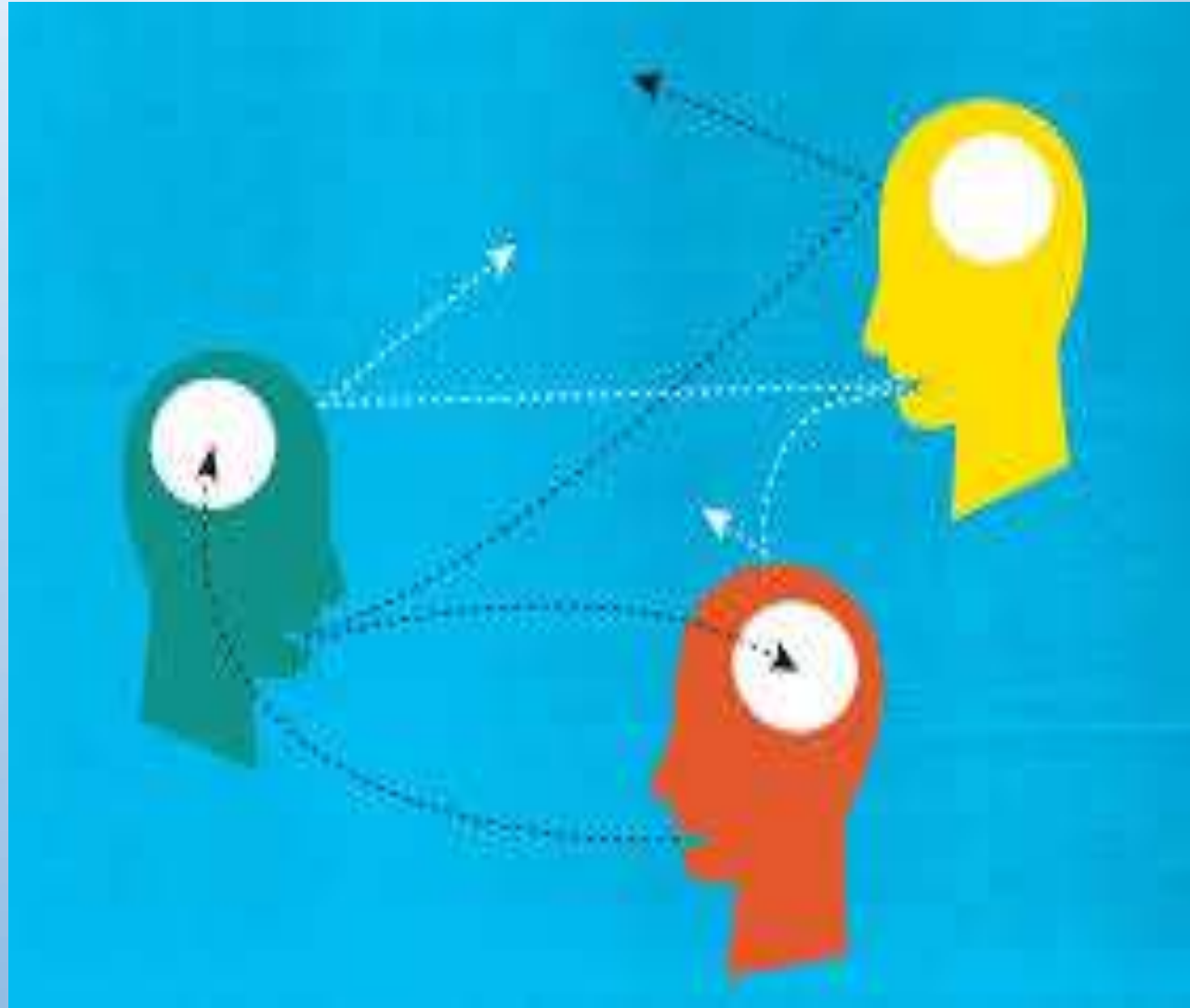
# A New Approach

REQUIRES A DIFFERENT  
WAY OF LOOKING AT THE  
ISSUE





# Understanding Multiple Frames of View





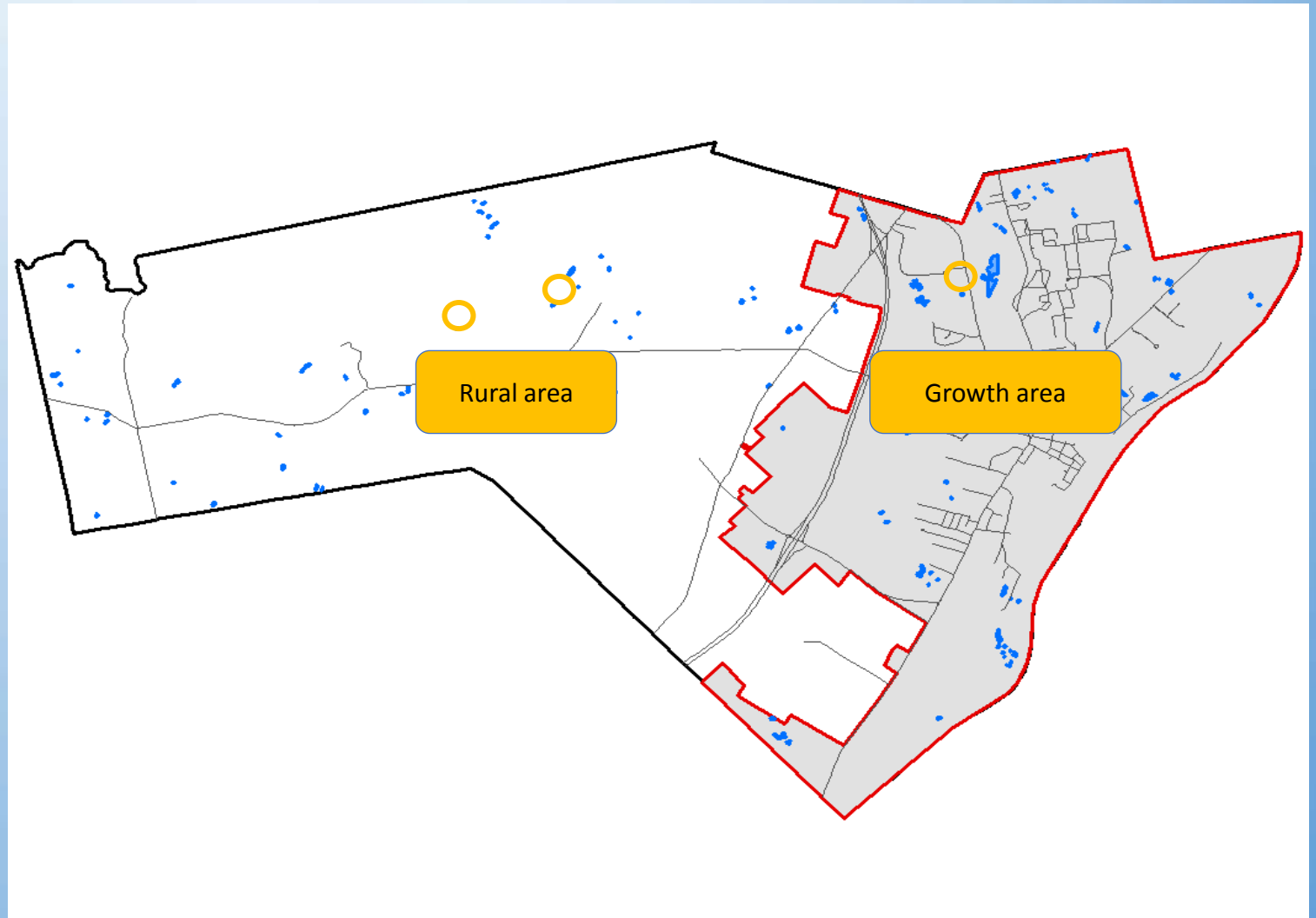
# And Multiple Perspectives of the Same Thing





# What is the Maine Vernal Pool SAMP?

- Alternative Mitigation Tool
- Approved by US Army Corps and ME DEP (Sept 2016)





# Key Benefits of the Maine Vernal Pool SAMP

- Streamlines development in growth areas
- Remunerates rural land owners
- Provides increased predictability for developers
- Supports municipal goals for growth and rural areas
- Completes strategic conservation at the landscape scale





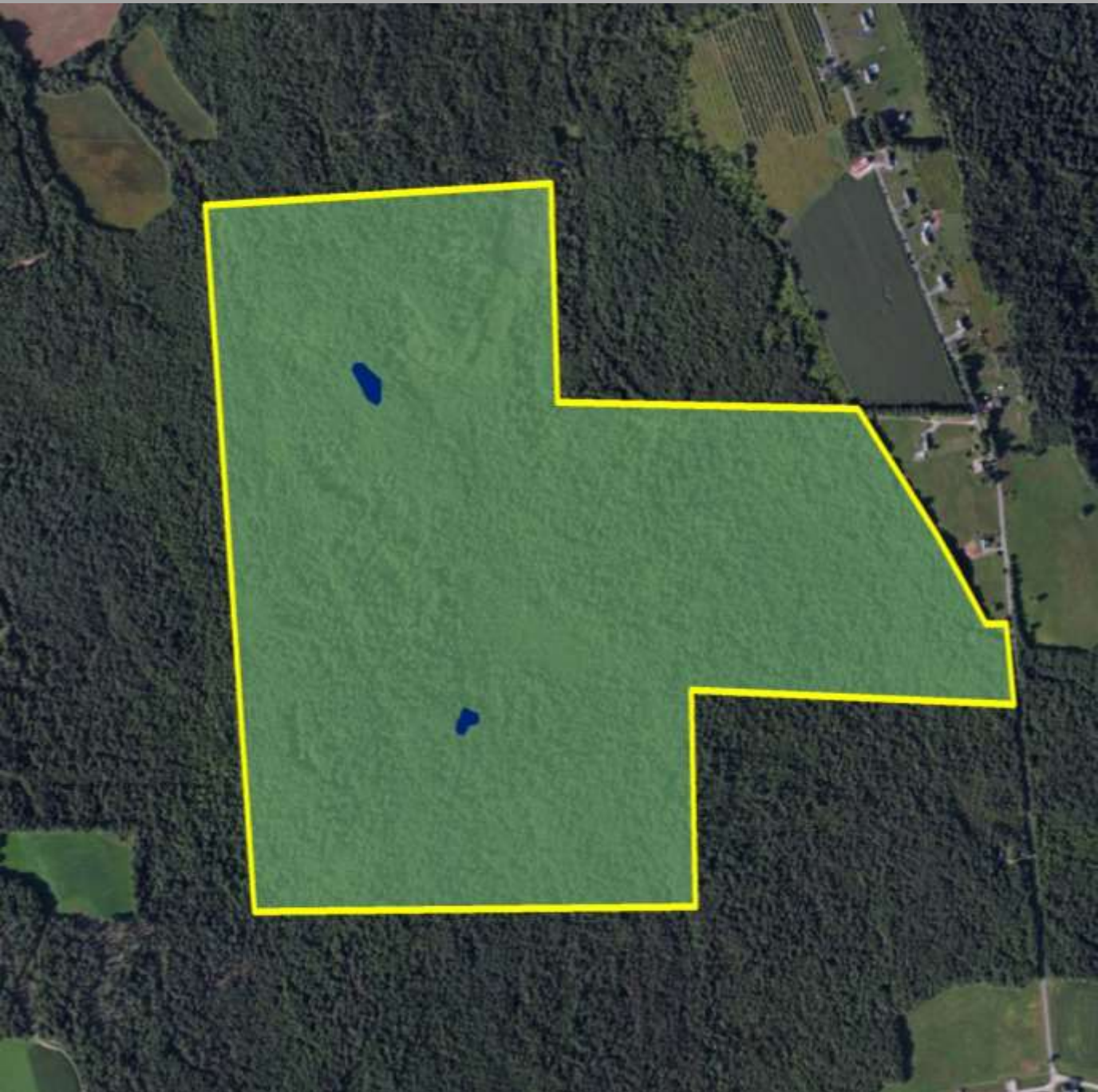
Rural  
Zone

Growth  
Zone











# How Does the Maine VP SAMP Work?

Putting the Option in Play

It all starts here



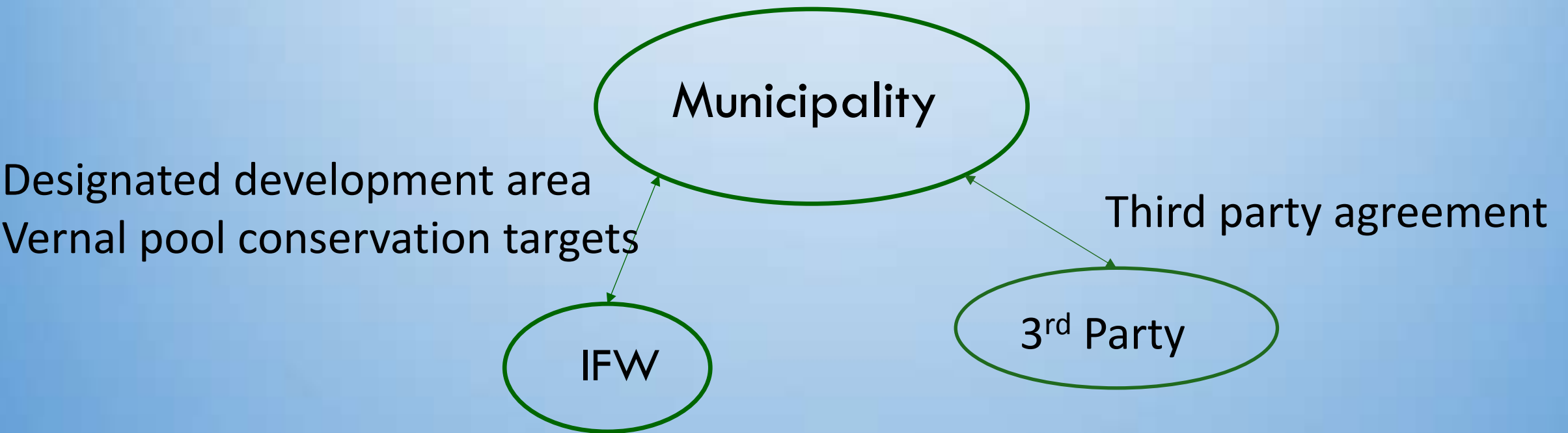
Municipality

Comprehensive plan  
Ordinances



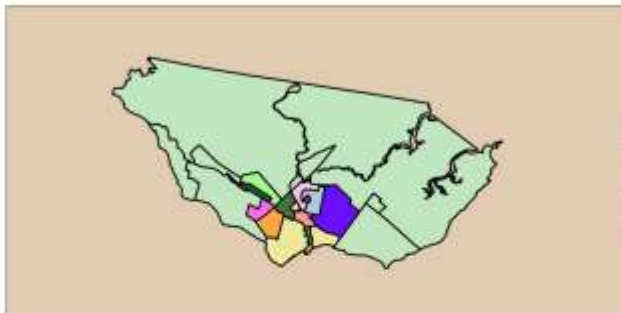
# How Does the Maine VP SAMP Work?

## Putting the Option in Play



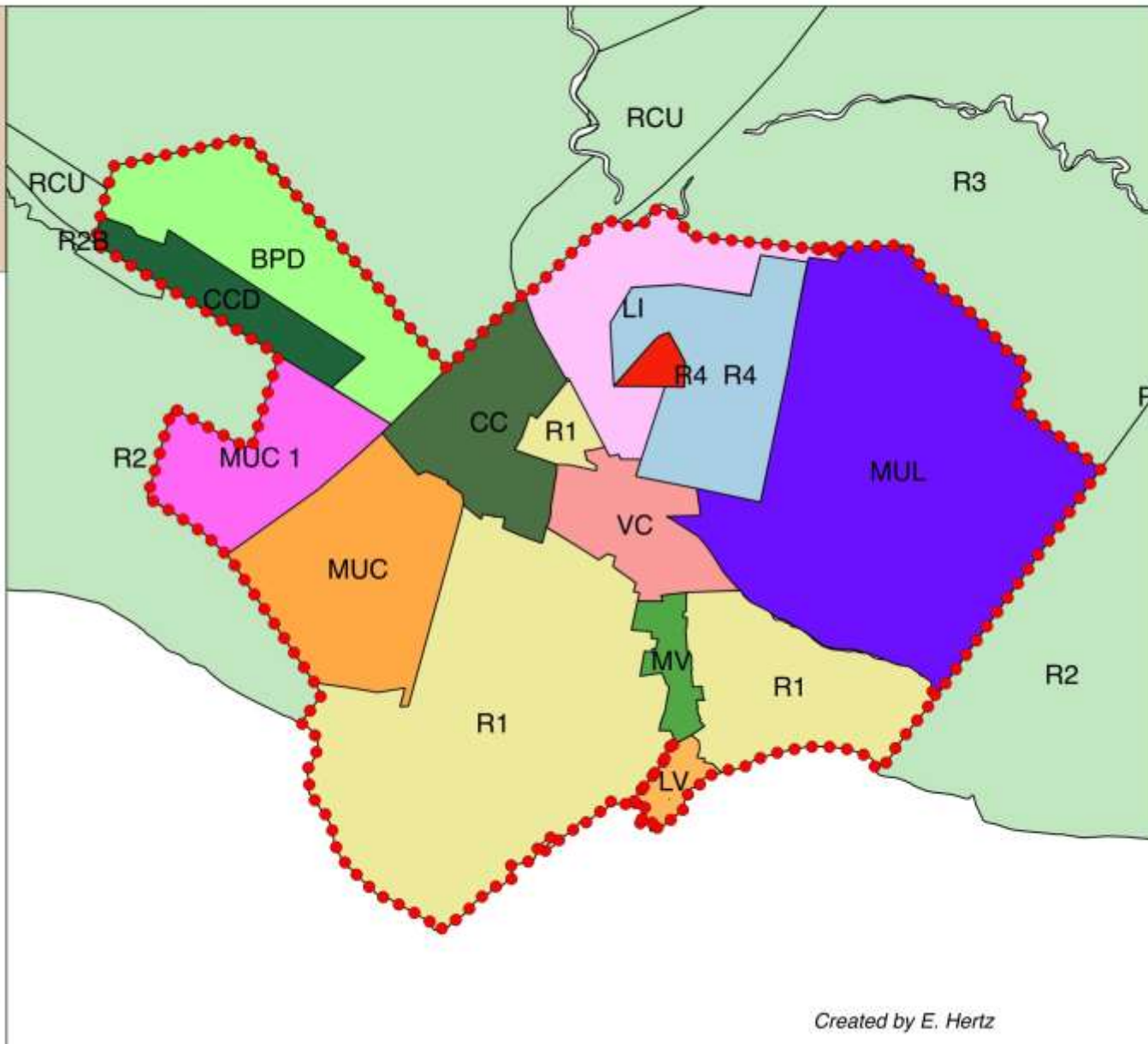


# TOPSHAM DESIGNATED DEVELOPMENT AREA JANUARY 2017



## Legend

-  DDA outline revised 1.24.17  
Topsham Zoning Map 5-20-2015
-  MUL Mixed Use Limited
-  BP2 Business Park 2
-  BPD Business Park
-  CC Commercial Corridor
-  CCD Commercial Corridor 196
-  LI Limited Industrial
-  LV Lower Village
-  MUC Mixed Use Commercial
-  MUC 1 Mixed Use Commercial 1
-  MV Middle Village
-  R1 Urban Residential
-  R4 Village Residential
-  VC Village Center

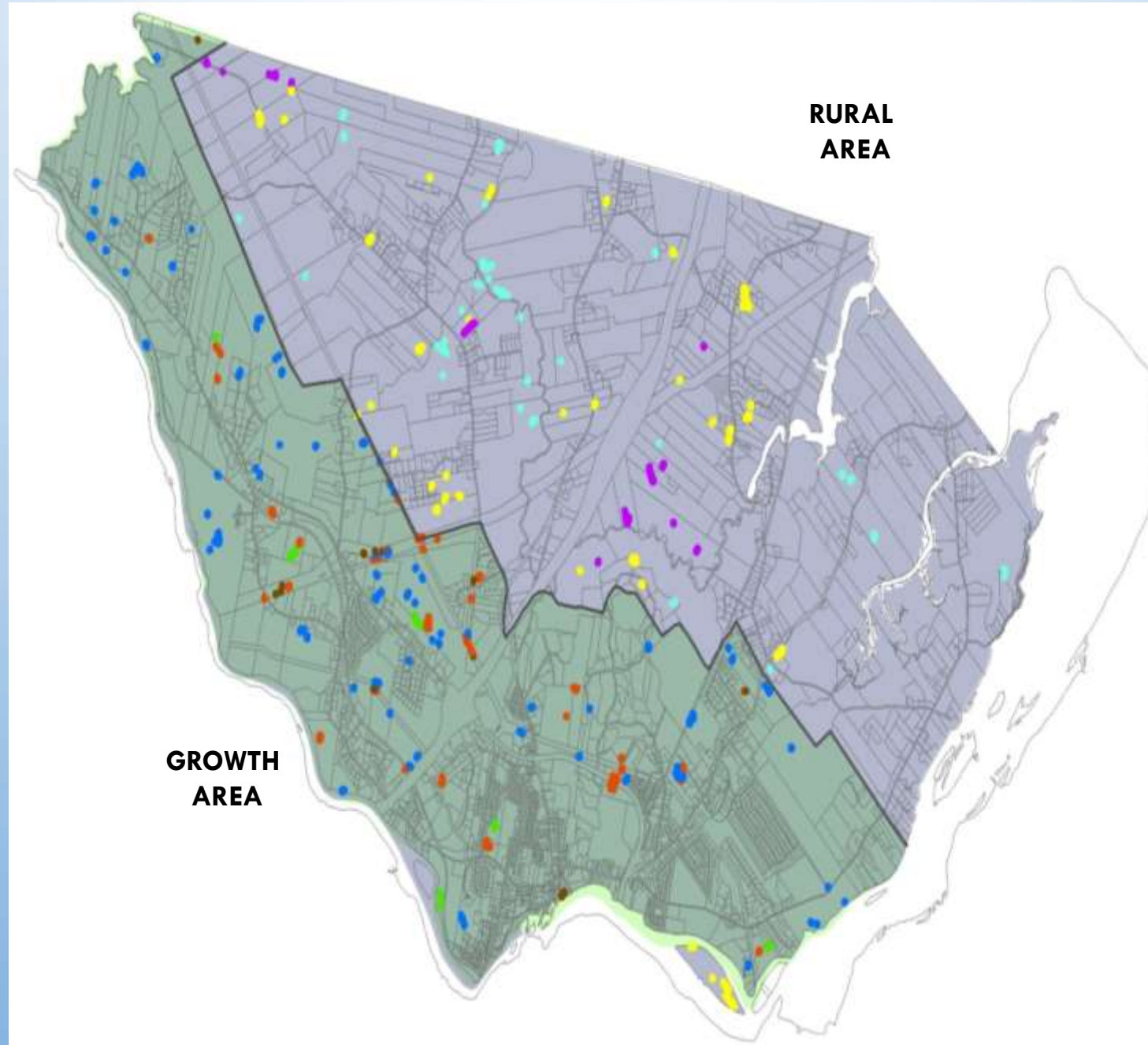


Created by E. Hertz



# TOPSHAM

- GROWTH AREA
- Meets SVP definition)
  - Vernal Pool
  - Potential Vernal Pool
  - Not a Vernal Pool

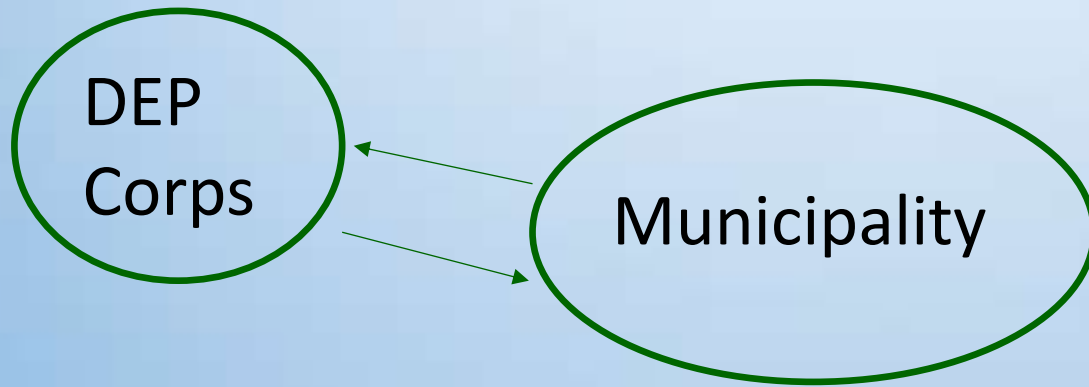


- RURAL AREA
- Meets criteria
  - Meets criteria C and D
  - Does not meet criteria



# How Does the Maine VP SAMP Work?

## Putting the Option in Play



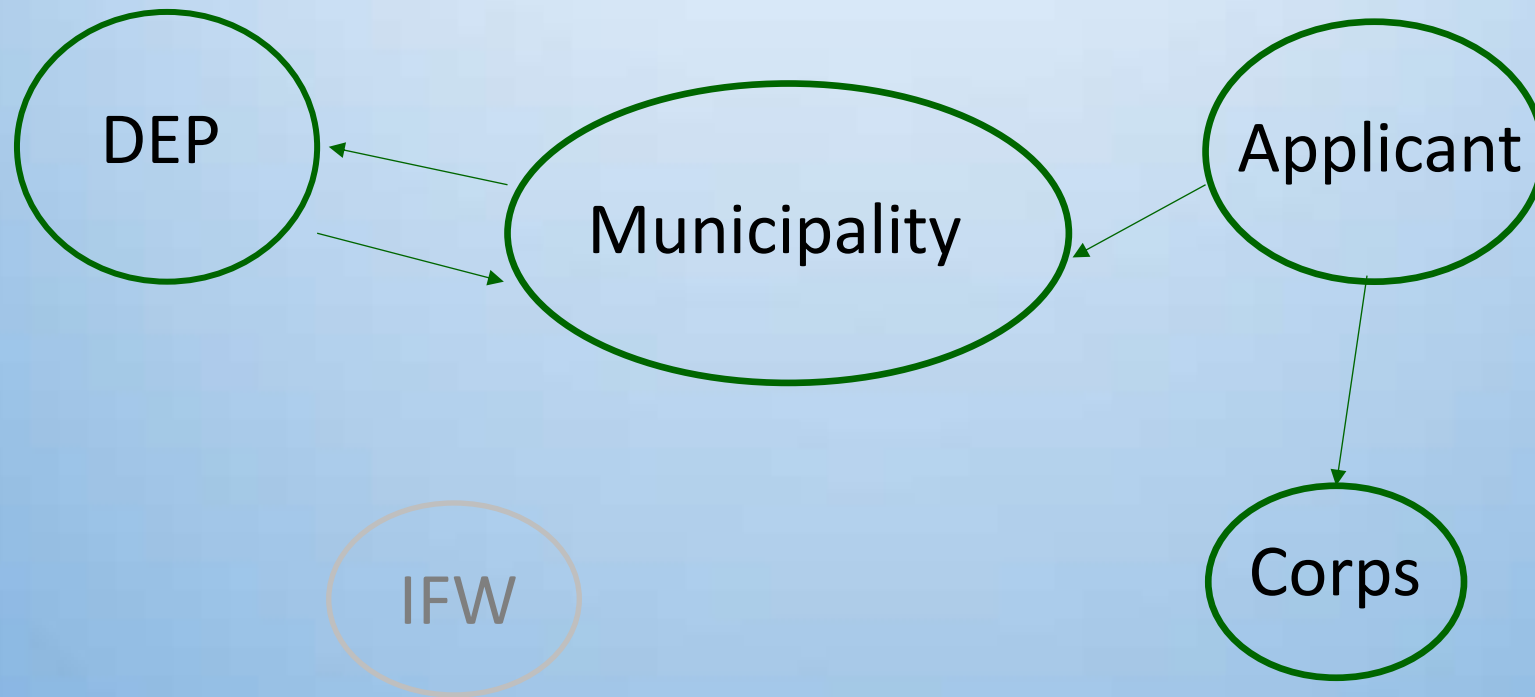
DDA approval  
Partial Delegated Authority





# How Does the Maine VP SAMP Work?

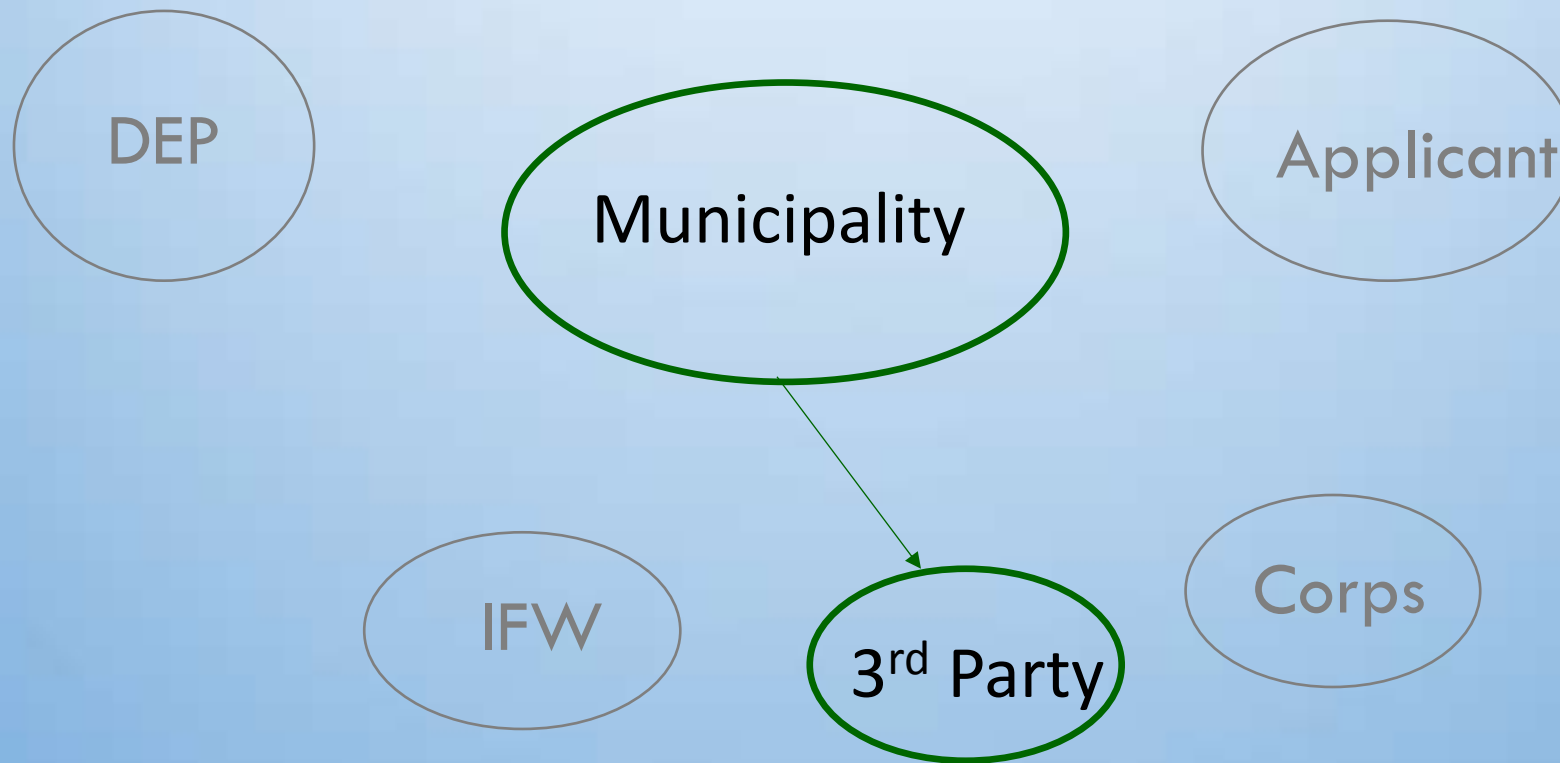
## Using the Tool: Development





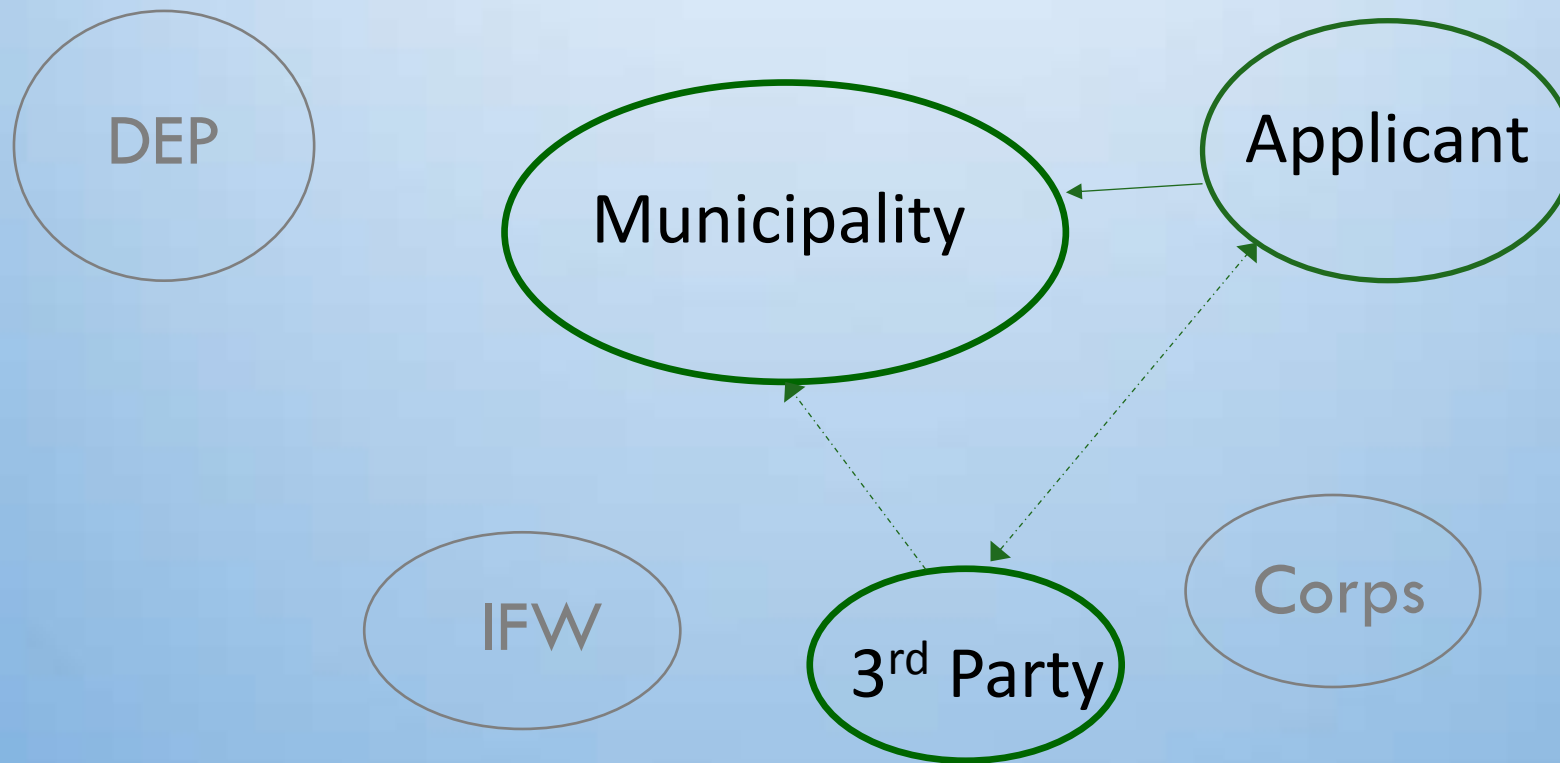
# How Does the Maine VP SAMP Work?

## Using the Tool : Conservation

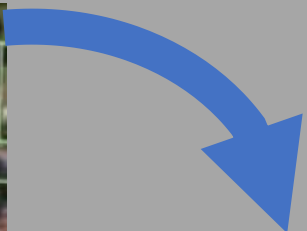


# How Does the Maine VP SAMP Work?

## Using the Tool: Conservation







# For More Information

- Where to find the Maine VP SAMP:

<http://www.nae.usace.army.mil/Missions/Regulatory/PublicNotices.aspx>



# Of Pools AND People



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Elizabeth Hertz

[hertzmaine@gmail.com](mailto:hertzmaine@gmail.com)

207-737-8135

Aram JK Calhoun

[calhoun@maine.edu](mailto:calhoun@maine.edu)