

# PLANNING TO PROTECT THE **FLORIDA WILDLIFE CORRIDOR 3.0**

## *BEYOND THE CORRIDOR* **TRANSECT PLANNING & CONNECTIVITY**

**Sept. 23, 2026 | Noon to 2 p.m. Eastern**





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**Test audio** in Zoom: Settings > Audio > Test Speaker & Microphone.



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- Florida Bar Attorneys *(1.5 General CLEs, #2607457N)*
- Florida Environmental Health Professionals *(2 Contact Hours or 0.2 CEUs)*
- Certified Floodplain Managers *(1 CEC)*
- Florida Landscape Architects *(1.5 DBPR Credits #0015987)*

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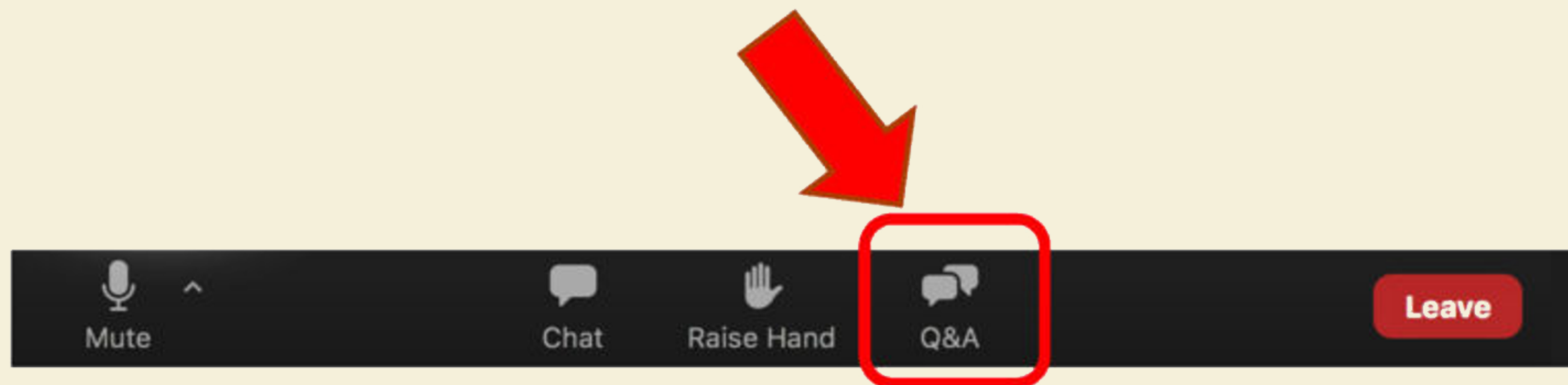




# Questions & Answers

Please submit questions for speakers using the Q&A button on your Zoom control panel.

Keep questions succinct and, if possible, indicate who your question should be directed to.





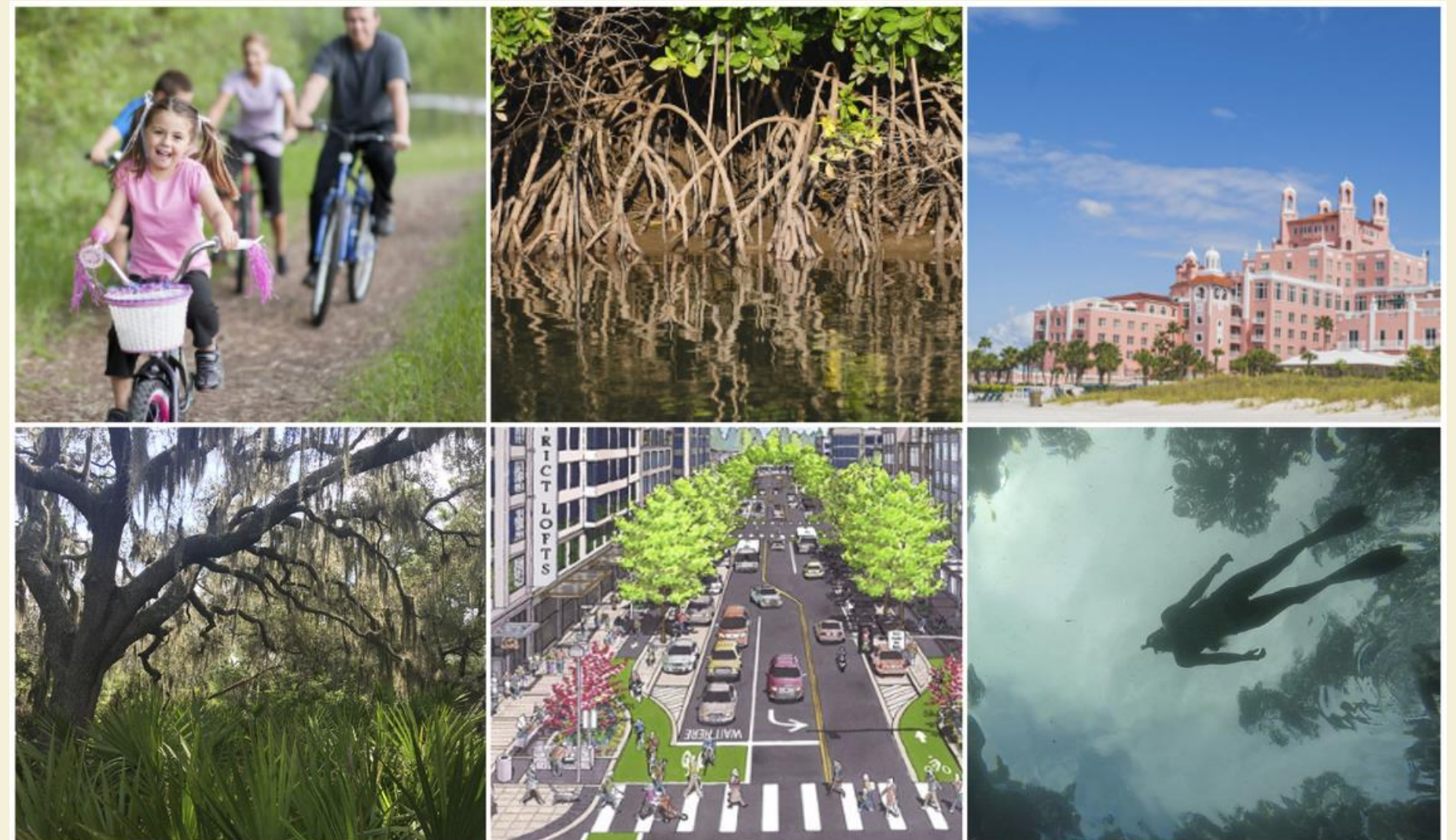


# Building Better Communities, Saving Special Places

**We are Florida's leading nonprofit  
advocate for sustainable communities**

**Work with citizens, community and  
state leaders, conservation and  
business groups**

**Educate, advocate and negotiate to  
protect Florida's high quality of life**



# PLANNING TO PROTECT THE FLORIDA WILDLIFE CORRIDOR 3.0



Payment for Ecosystem Services: *A Conservation Tool for Florida's Future*



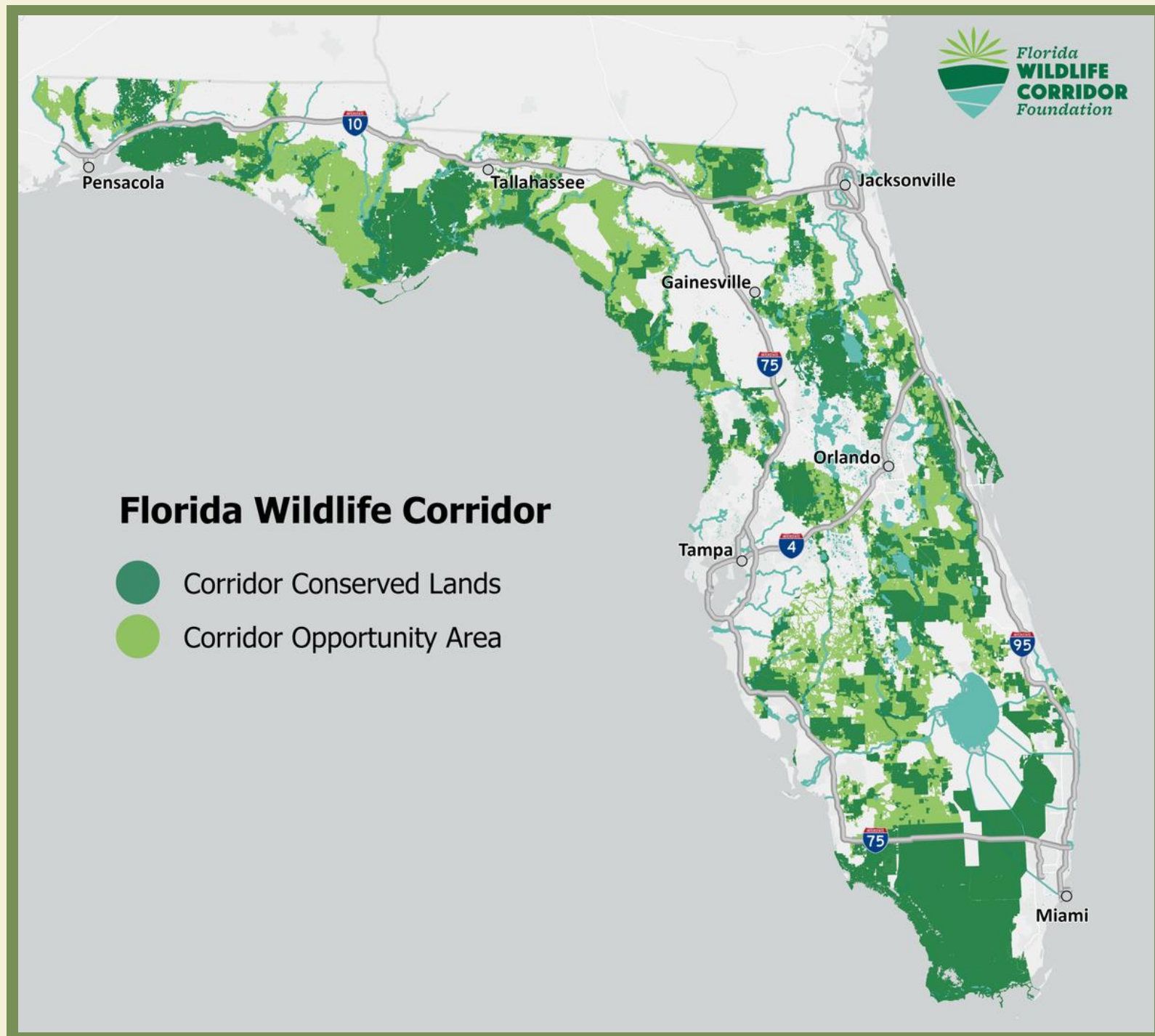
Beyond the Corridor: Transect Planning and Connectivity



Connectivity Across Scales: *Tools and Concepts for the Urban-to-Rural Transect* (12:00 – 2:00 P.M. ET)



# The Florida Wildlife Corridor



**10 Million Acres Protected,  
8 Million Acres of Opportunity**

A vast network of forests, rivers, ranches, and farms that connect the Everglades to the Georgia and Alabama borders. It's 18 million acres of life-sustaining land and water where wildlife can still roam freely and people can hike, paddle, and thrive.

# UF | Center for Landscape Conservation Planning UNIVERSITY *of* FLORIDA

Established in 2010 to provide an official forum within the University of Florida's College of Design, Construction and Planning for conducting applied research on the relationship between conservation, green infrastructure, and land use.

Affiliated with the Department of Landscape Architecture, forming a bridge between the disciplines of design, planning and wildlife conservation, and providing applied learning opportunities for students.

Results of the Center's research are used to influence public policy through education and direct involvement in the application of relevant science, technology, sound planning principles, and state-of-the-art methods of conservation analysis, planning and management.







*Florida*  
**WILDLIFE  
CORRIDOR**  
*Foundation*

The Florida Wildlife Corridor Foundation exists to champion the vision of a statewide network of nearly 18 million acres of connected lands and water supporting wildlife and people.





**Live Wildly seeks to balance smart growth, a robust economy, and a connected, resilient landscape so that everyone can Live Wildly for generations to come.**





# Other Partners



**The Florida Conservation Group** focuses on the conservation of Florida's natural and agricultural lands with the goal of advancing science-based land protection in the state of Florida.



# Isabella Guttuso Browne

## UF Center for Landscape Conservation Planning

Isabella Guttuso Browne is the Urban and Recreational Green Infrastructure Coordinator and Landscape Designer at the University of Florida Center for Landscape Conservation Planning.

Her work focuses on applied research, planning, and design strategies that protect and connect green infrastructure networks across urban and rural scales. She contributes to projects in community and conservation planning, landscape resilience, and sustainable recreation, with an emphasis on translating science into actionable planning and design solutions. Isabella obtained her Master's in Landscape Architecture from the University of Florida.





# Galina Tachieva, AICP

## DPZ CoDesign

Galina Tachieva is Managing Partner of DPZ CoDESIGN, directing the firm's work in the United States and internationally. With more than 25 years of experience in sustainable planning, urban redevelopment, and form-based codes, she is the author of Sprawl Repair Manual, which provides practical strategies for transforming auto-oriented development into more walkable and complete communities.

Her work spans the United States, Latin America, and Europe and includes downtown and urban revitalization, regional planning, environmental conservation, new communities, and resort towns.

A Fellow of the Congress for the New Urbanism (CNU) and founding member of the Council for European Urbanism (CEU), she has also led CNU's Sprawl Retrofit Initiative. She received her architectural education in Sofia, Bulgaria, and a Master's degree in urban design from the University of Miami, and is AICP certified and a LEED Accredited Professional.





# Dr. Jay Exum

## Exum Associates

Dr. Jay Exum received his Ph.D. in wildlife ecology from Auburn University in 1985 and began his career in central Florida.

He has provided ecological expertise on projects related to threatened and endangered species, wetlands ecology and large-scale conservation planning. In his private practice, he has represented private businesses, counties, public agencies and NGOs on resource management, land acquisition, and wildlife conservation across Florida and the Southeast.

Jay has also served as president of the Friends of the Wekiva River, Chairman of the Board of the Florida Wildlife Federation, and president of the Florida Chapter of The Wildlife Society.





# Kylie Paul

## Center for Large Landscape Conservation

Kylie tackles issues surrounding wildlife habitat connectivity and transportation ecology at the Center for Large Landscape Conservation, based in Montana. She received her Masters of Science from the University of Montana.

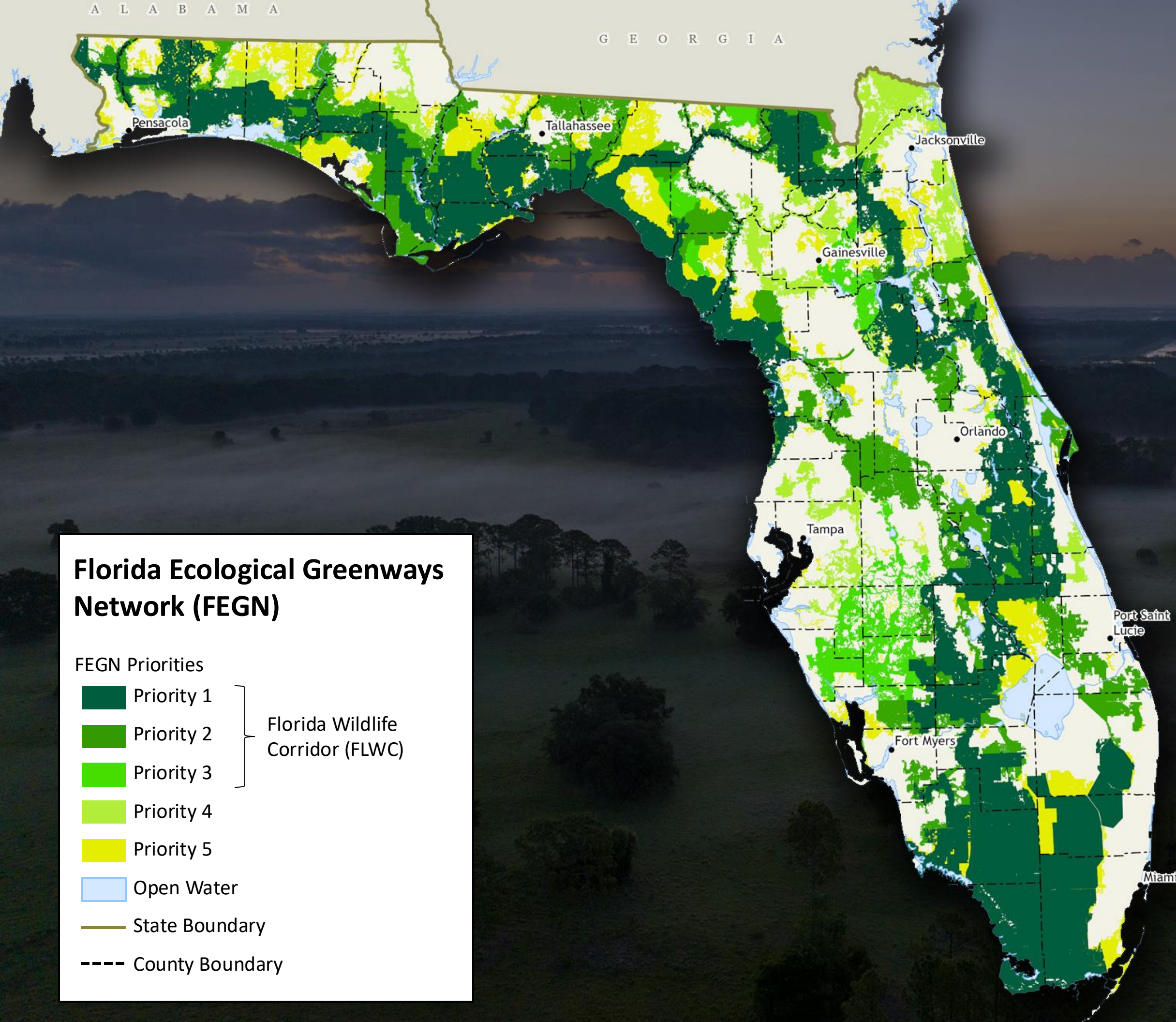
She advances wildlife-friendly transportation and connectivity projects, programs, and policies at federal, state, and local scales. She uses her extensive experience in nonprofit conservation, local government, wildlife research, and private business sectors to enrich her work.





A L A B A M A

G E O R G I A



## Florida Ecological Greenways Network (FEGN)

### FEGN Priorities

- |                                                                                     |                 |                                    |
|-------------------------------------------------------------------------------------|-----------------|------------------------------------|
|  | Priority 1      | } Florida Wildlife Corridor (FLWC) |
|  | Priority 2      |                                    |
|  | Priority 3      |                                    |
|  | Priority 4      |                                    |
|  | Priority 5      |                                    |
|  | Open Water      |                                    |
|  | State Boundary  |                                    |
|  | County Boundary |                                    |

### Priority 1

Critical Linkages. Essential to completing a functionally connected, statewide network of public and private conservation lands.

### Priority 2

Supporting areas around Critical Linkages, widening and strengthening the corridor. Also includes additional corridors connecting to other significant areas statewide.

### Priority 3

Alternate routes to Critical Linkages, functional backups if a Critical Linkage can't be protected.

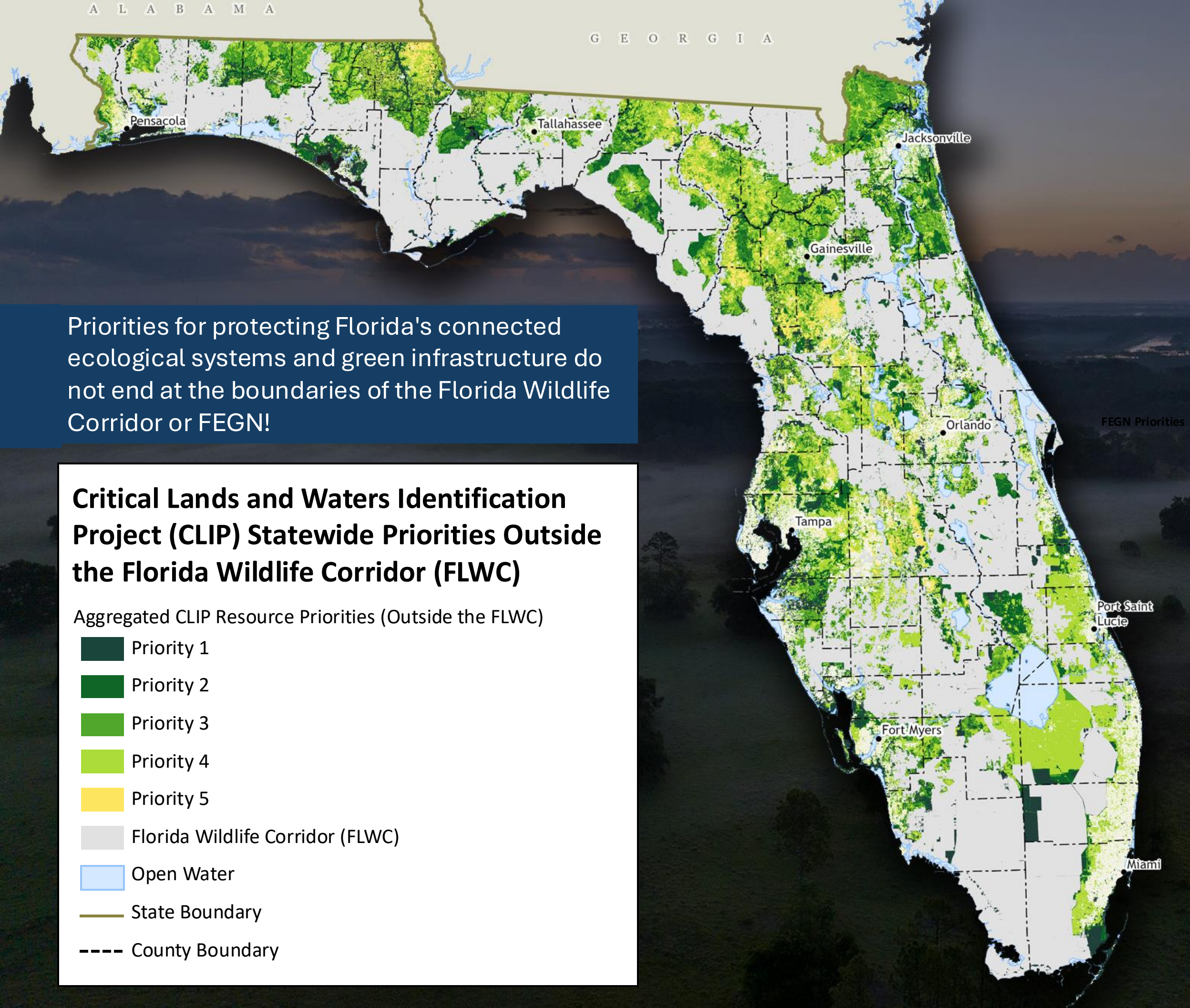
### Priority 4

Riparian corridors, and other regionally significant opportunities to protect large, intact landscapes.

### Priority 5

All other large, intact landscapes supporting the statewide ecological network.



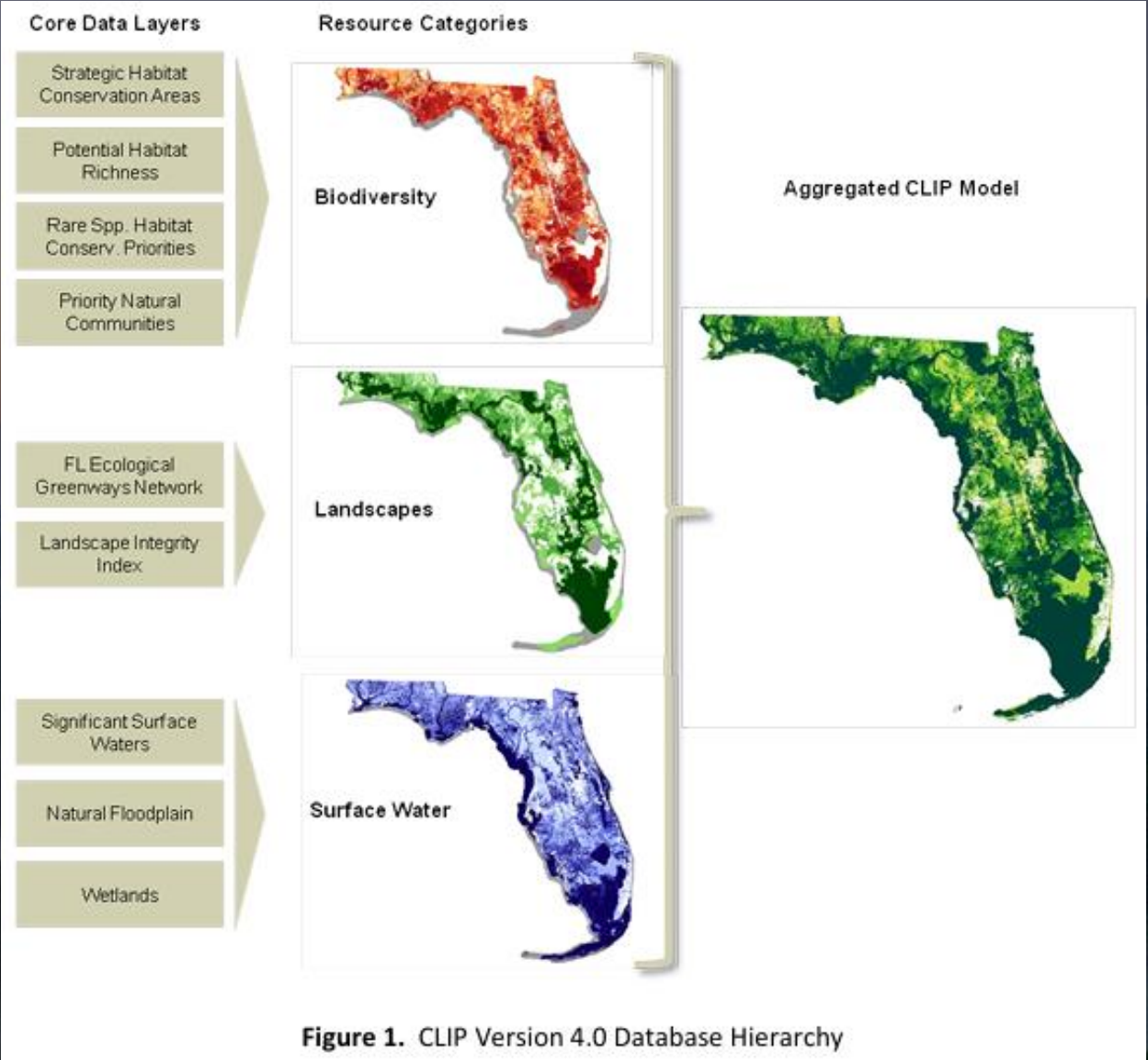


Priorities for protecting Florida's connected ecological systems and green infrastructure do not end at the boundaries of the Florida Wildlife Corridor or FEGN!

### Critical Lands and Waters Identification Project (CLIP) Statewide Priorities Outside the Florida Wildlife Corridor (FLWC)

Aggregated CLIP Resource Priorities (Outside the FLWC)

- Priority 1
- Priority 2
- Priority 3
- Priority 4
- Priority 5
- Florida Wildlife Corridor (FLWC)
- Open Water
- State Boundary
- County Boundary



The Aggregated CLIP Priorities layer combines the Biodiversity, Landscape, and Surface Water resource category models into a single, statewide ranking (Priority 1–5) of Florida's most important conservation lands and waters, based on rule-based selections and overlap between the three category priorities.

CLIP partners: Center for Landscape Conservation Planning, Florida Natural Areas Inventory (FNAI), and the Florida Fish and Wildlife Conservation Commission

Photo: Lauren Yoho  
Source: Wildpath

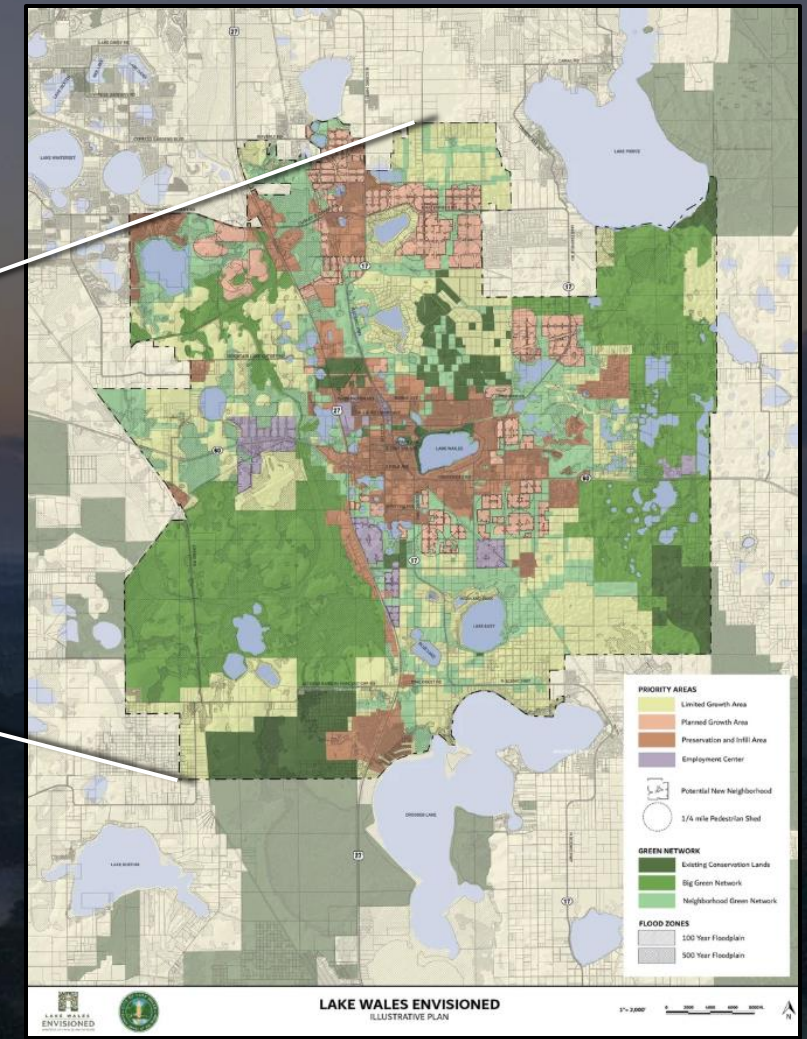
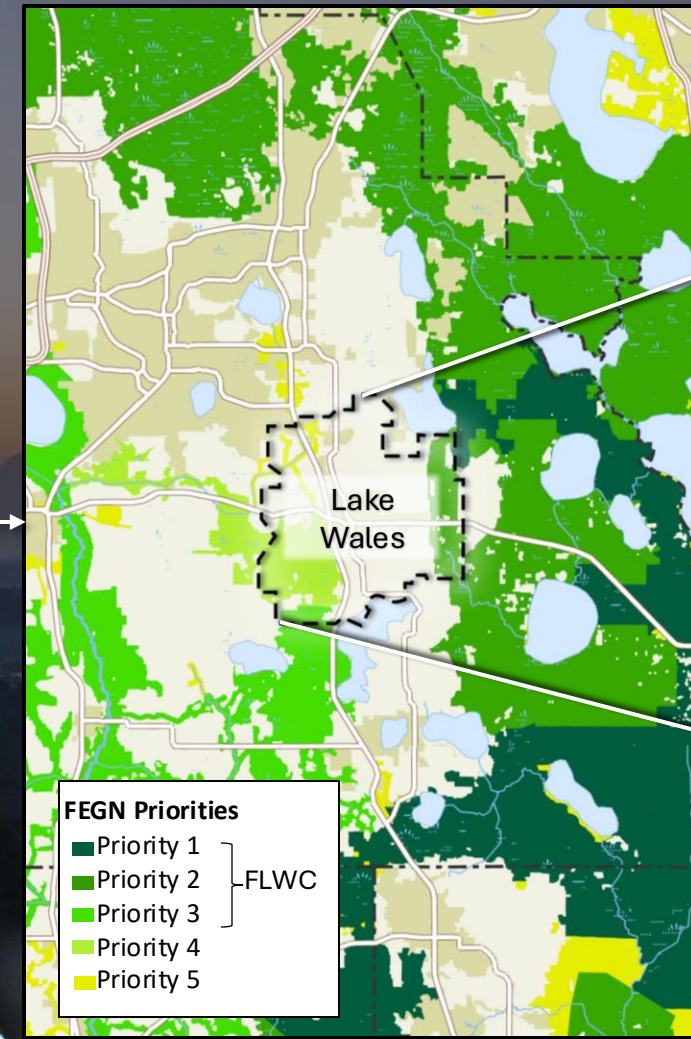


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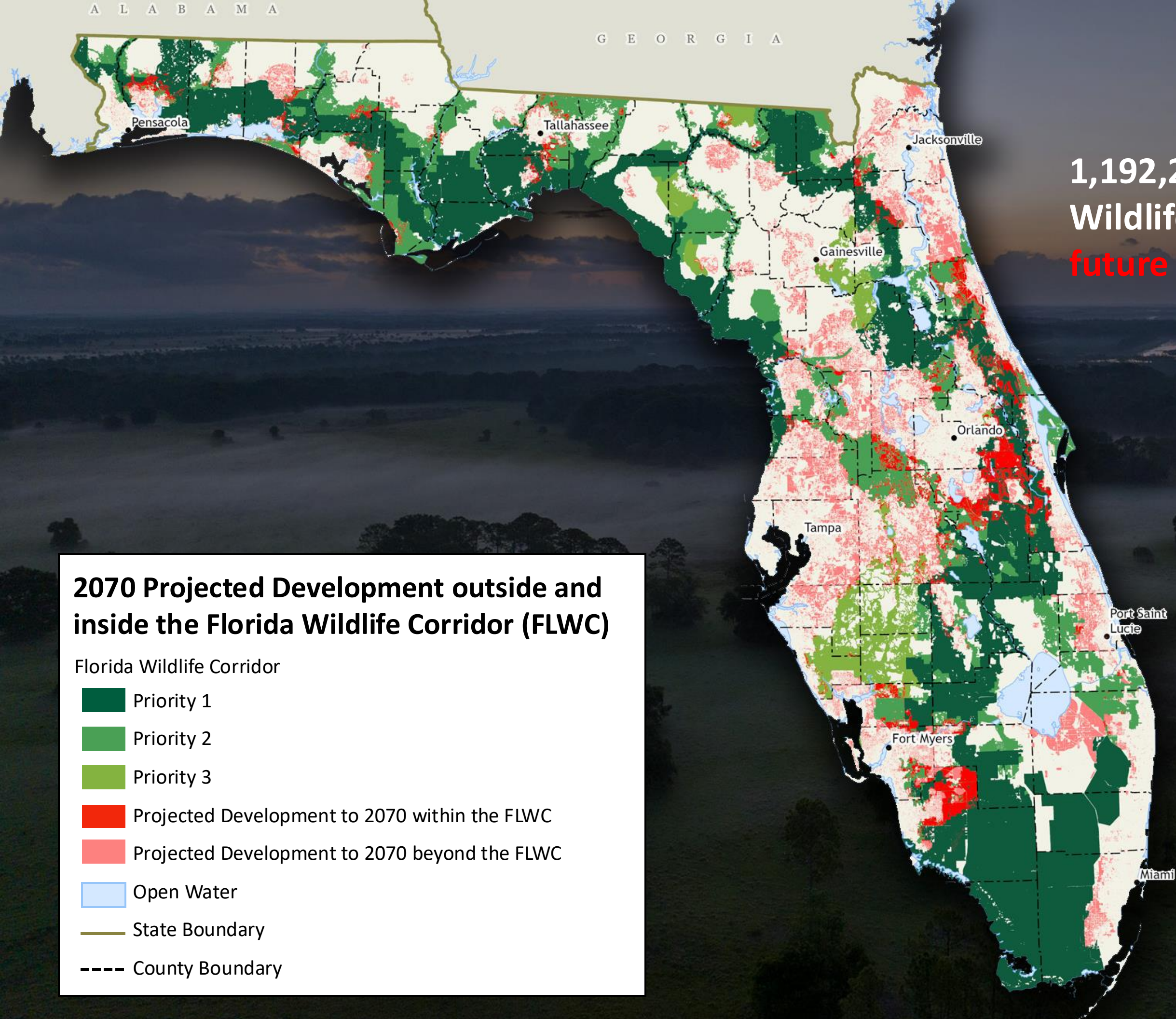


The Lake Wales Envisioned project is an example of a community planning initiative that included the identification of local corridor networks and their connections to the FLWC and greater FEGN, supporting regional habitat and conservation planning.  
Source: [www.lakewalesenvisioned.com](http://www.lakewalesenvisioned.com)

CLIP partners: Center for Landscape Conservation Planning, Florida Natural Areas Inventory (FNAI), and the Florida Fish and Wildlife Conservation Commission

Photo: Lauren Yoho  
Source: Wildpath





1,192,242 + acres *inside* the Florida Wildlife Corridor are **projected for future development by 2070**

3,080,17 + acres *outside* the Florida Wildlife Corridor are **projected for future development by 2070**

**2070 Projected Development outside and inside the Florida Wildlife Corridor (FLWC)**

Florida Wildlife Corridor

- Priority 1
- Priority 2
- Priority 3
- Projected Development to 2070 within the FLWC
- Projected Development to 2070 beyond the FLWC
- Open Water
- State Boundary
- County Boundary

Data source: University of Florida Center for Landscape Conservation Planning and 1000 Friends of Florida. (2021). Florida's Rising Seas: Mapping Our Future – Sea Level 2070

Photo: Lauren Yoho  
Source: Wildpath



# WHAT IS THE TRANSECT

PHILOSOPHY

THEORY

METHODOLOGY



Galina Tachieva  
September 23, 2026







# THE TRANSECT BEYOND THE DIAGRAM

## PHILOSOPHY

Human and natural habitats are part of one continuum and should coexist in balance.

## THEORY

Different forms of life, including people, flourish in different habitats.

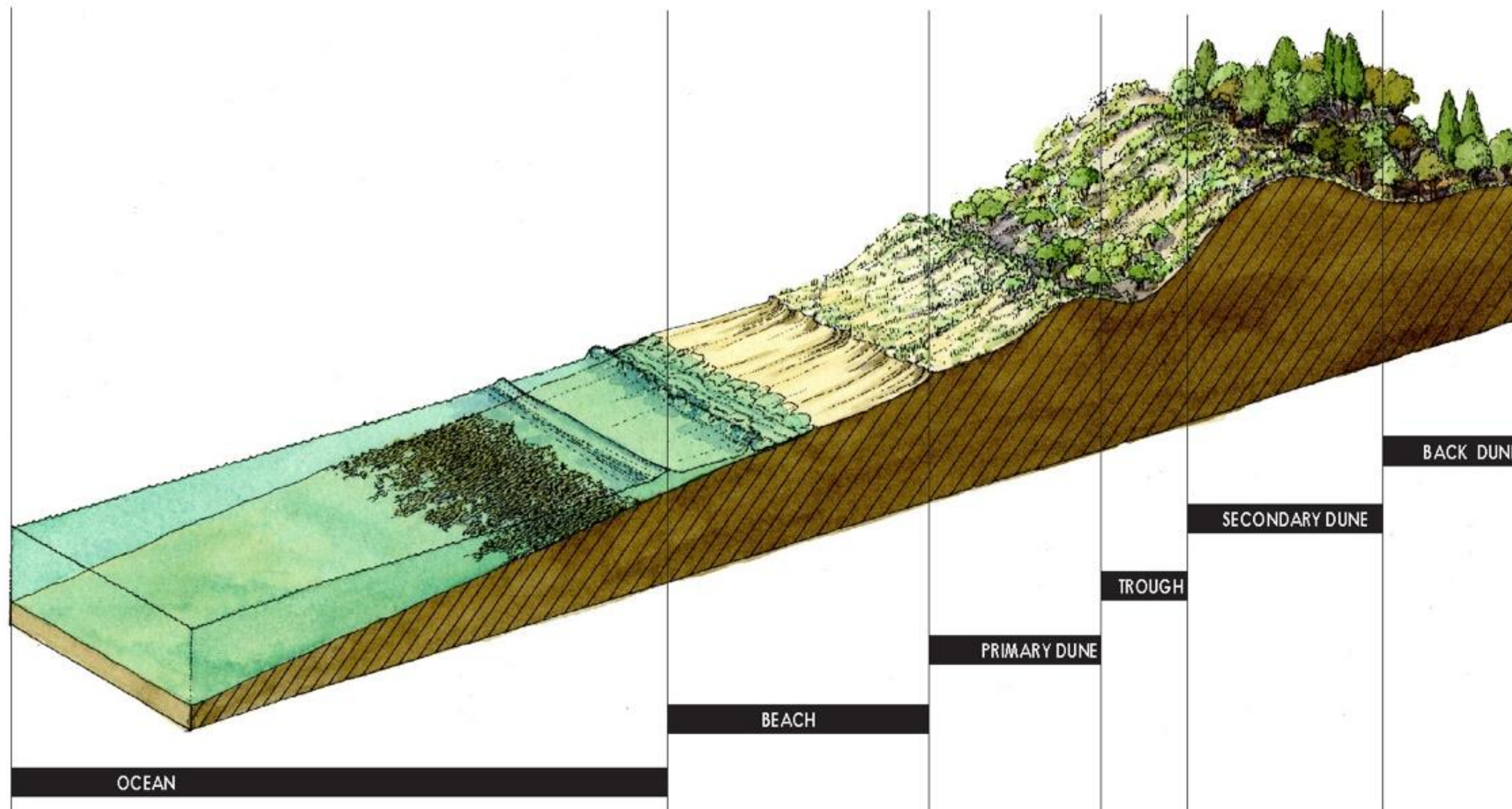
## METHODOLOGY

The Transect classifies habitats from wilderness to urban core and guides how we analyze and design them.















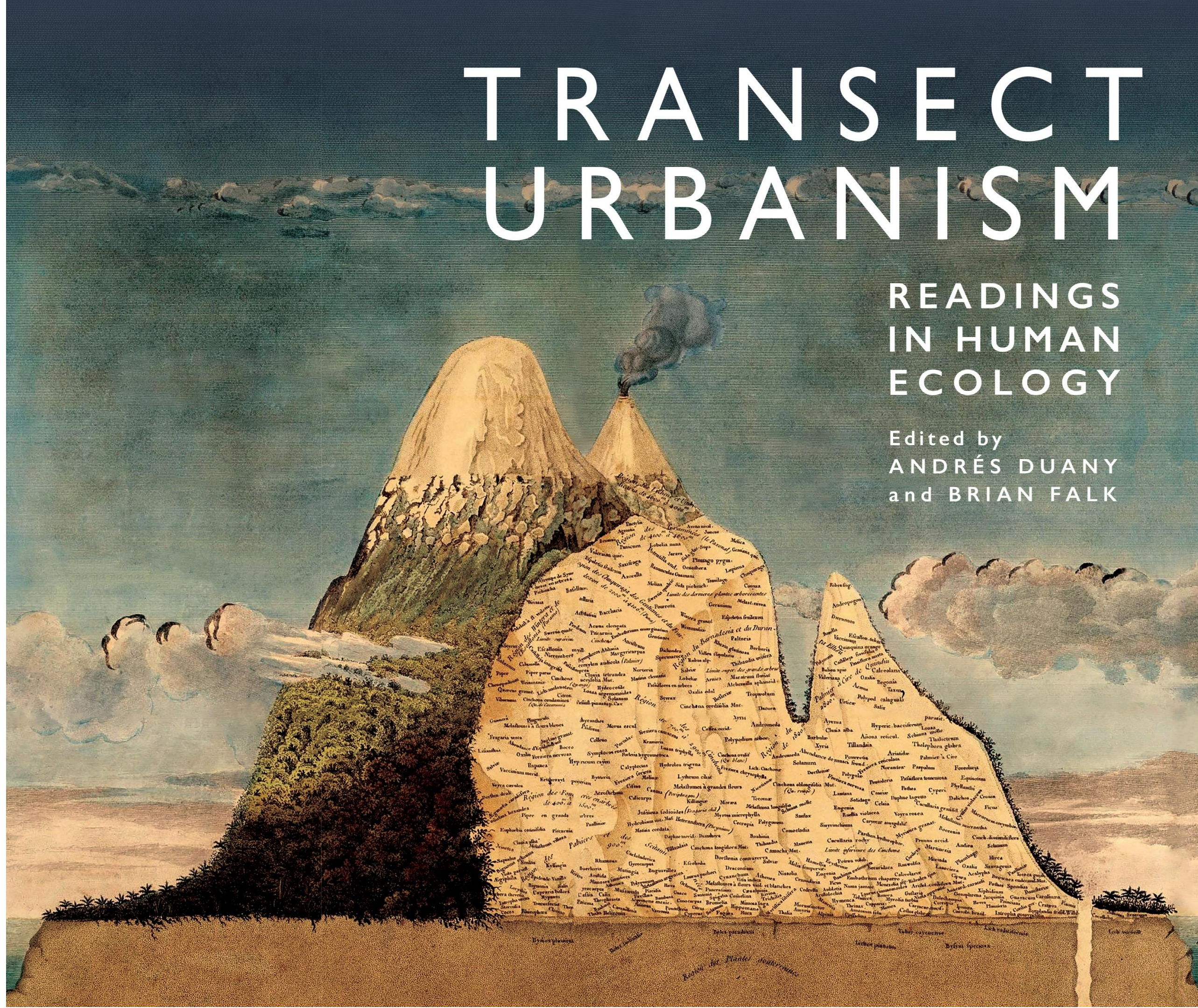




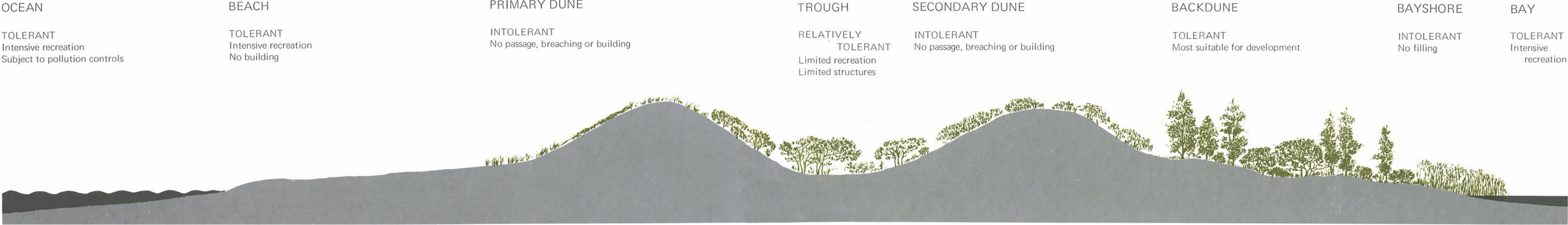
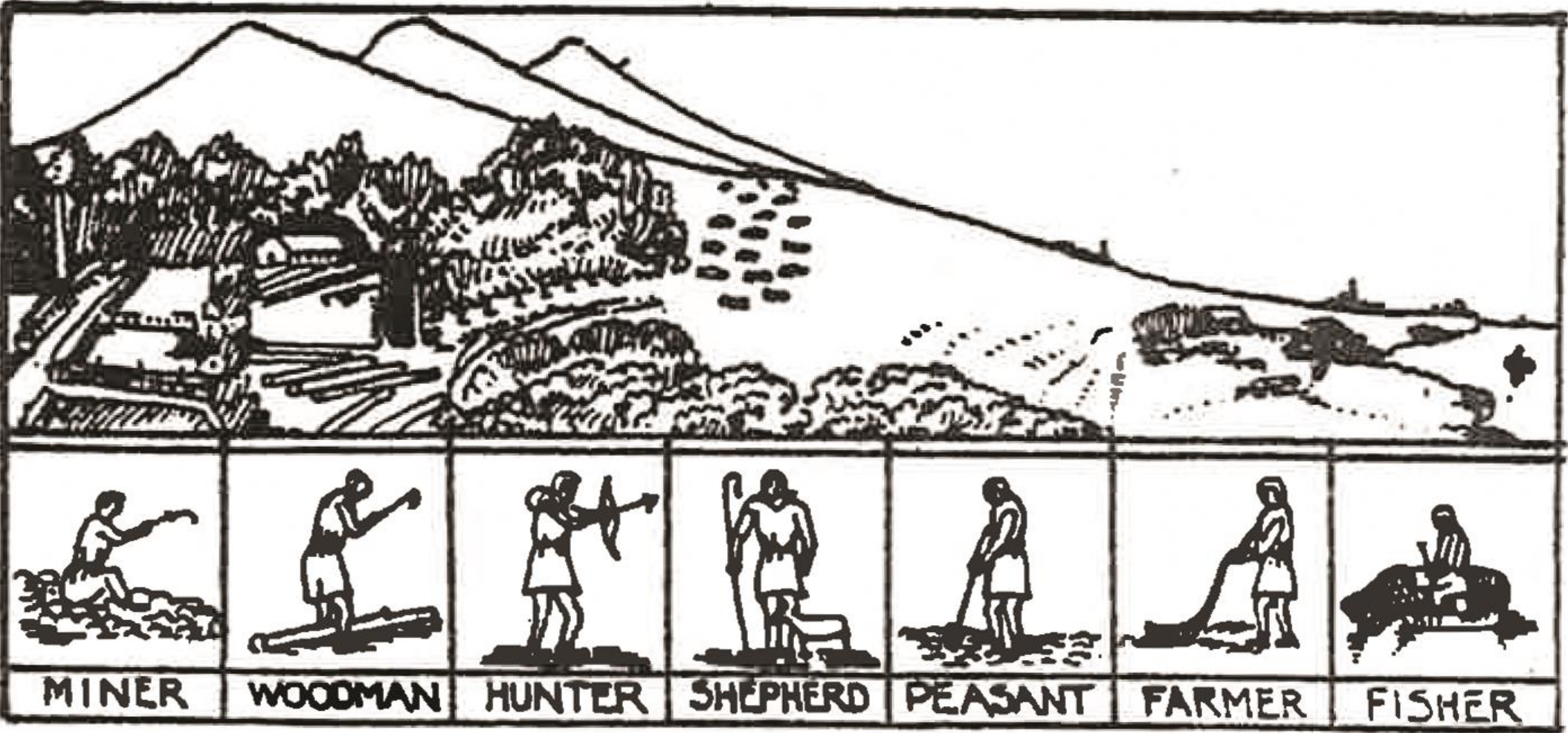
# TRANSECT URBANISM

READINGS  
IN HUMAN  
ECOLOGY

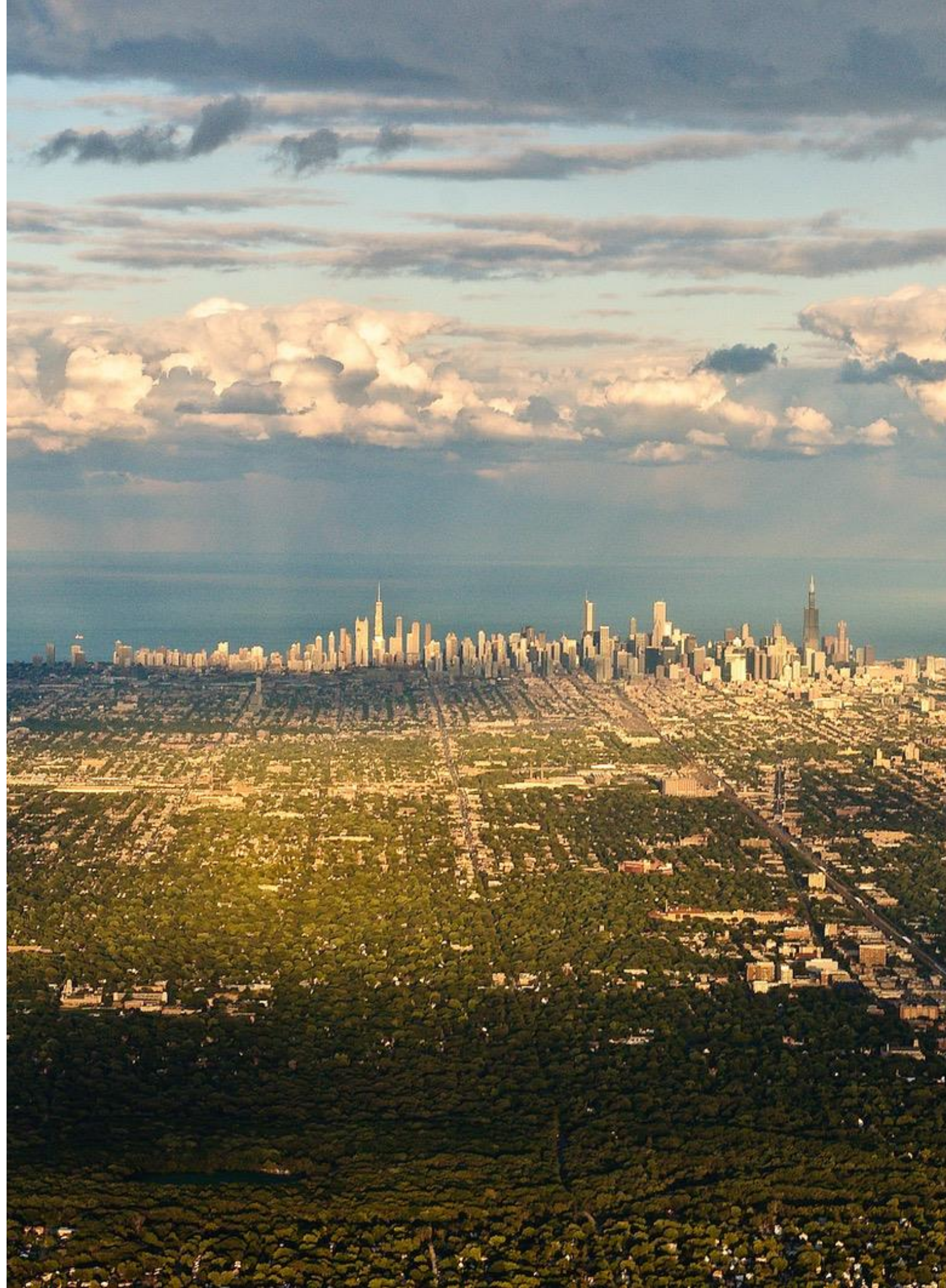
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ANDRÉS DUANY  
and BRIAN FALK





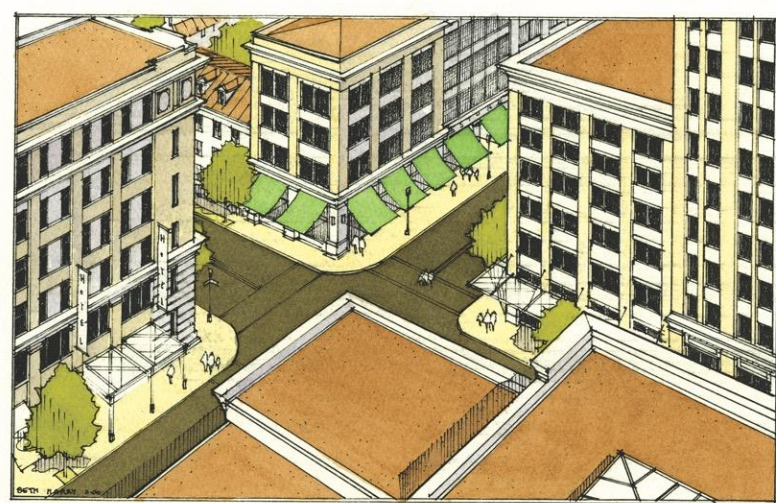
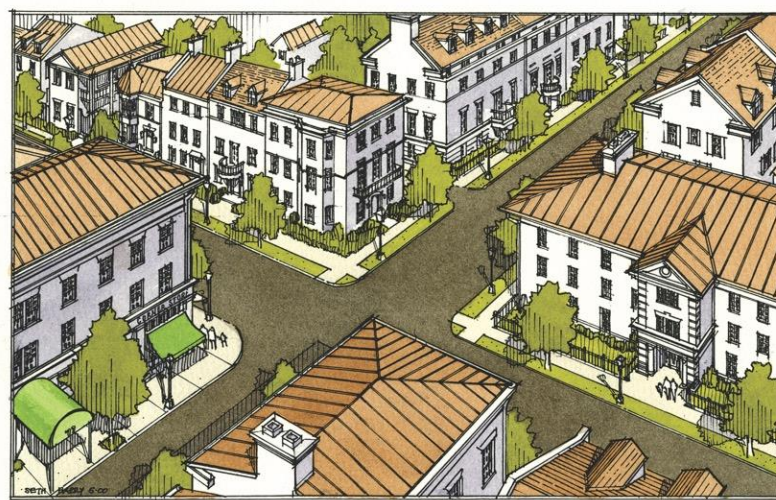
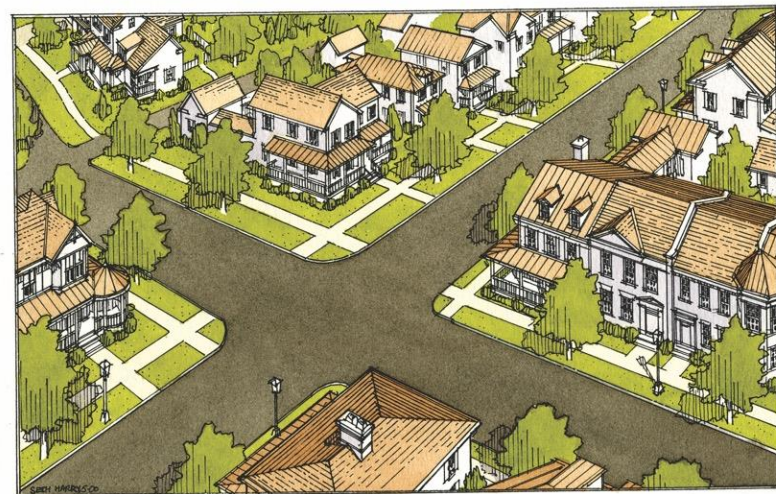
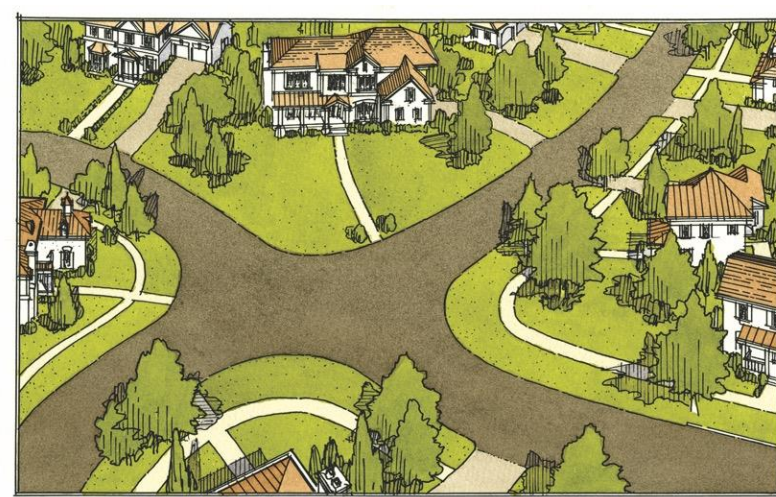




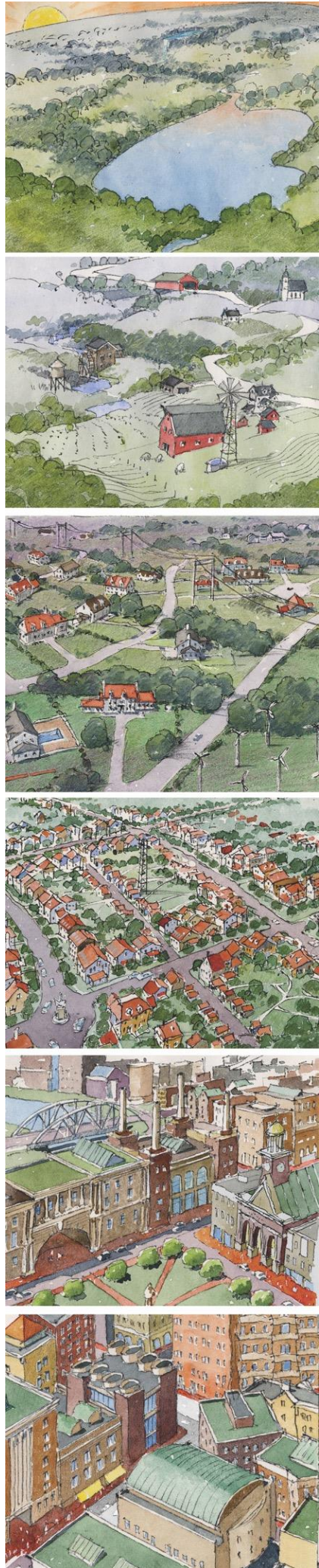
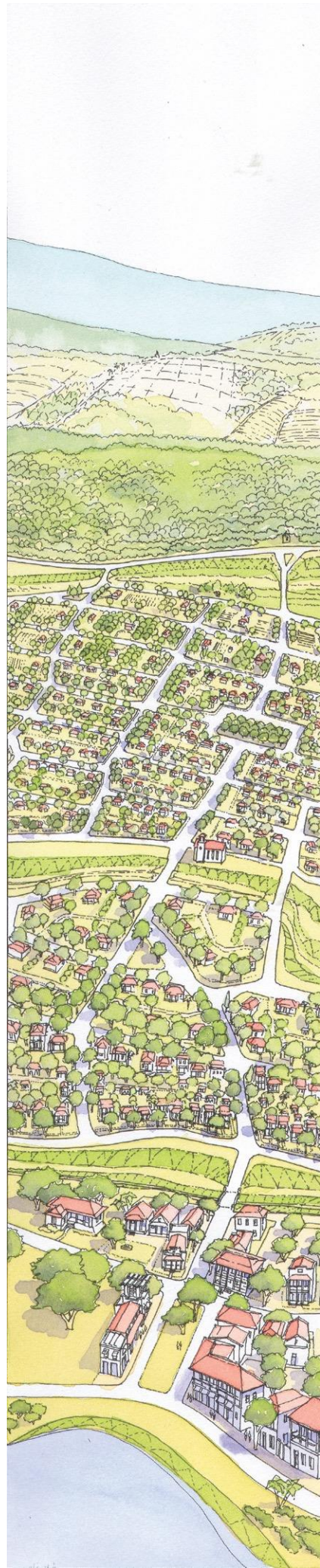


Robert Elves aerial photo











T3



T4



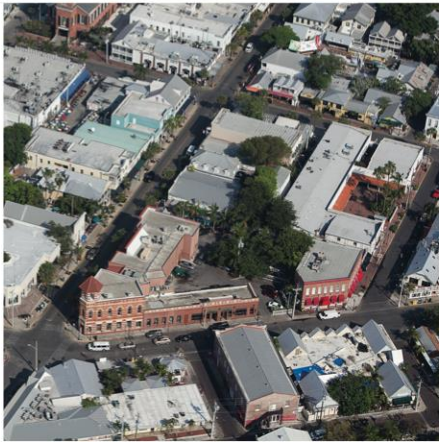
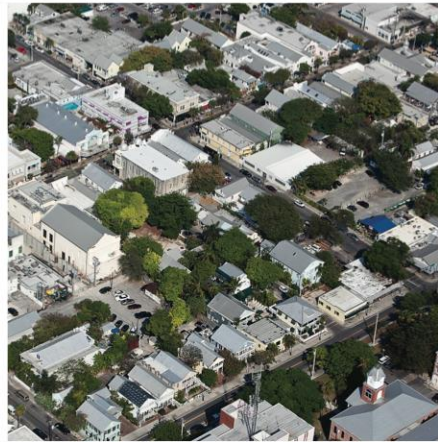
T5



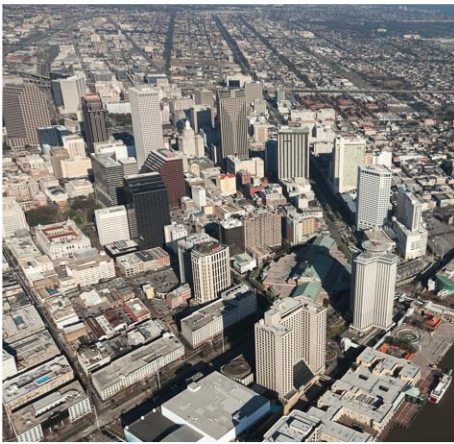
T6



SAN FRANCISCO



OMAHA



NEW ORLEANS



BALTIMORE

JORGE PLANAS DPZ CODESIGN



T-1 and T-2



T-2 and T-3



T-3 and T-4



T-4, T-5 and T-6



**T1 – NATURAL**



LEOPOLD CANAL, BELGIUM

**T2 – RURAL**



GIETHOORN, NETHERLANDS

**T3 – SUB-URBAN**



GIETHOORN, NETHERLANDS

**T4 – GENERAL URBAN**



ROTTERDAM, NETHERLANDS

**T5 – URBAN CENTER**



AMSTERDAM, NETHERLANDS

**T4 to T3**



ALYS BEACH, FLORIDA

**T4 to T3**



I'ON, SOUTH CAROLINA



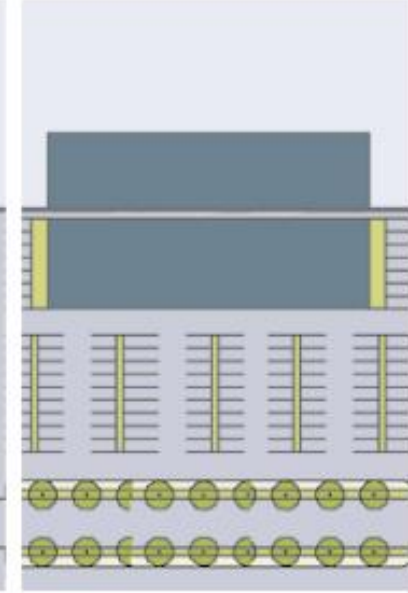
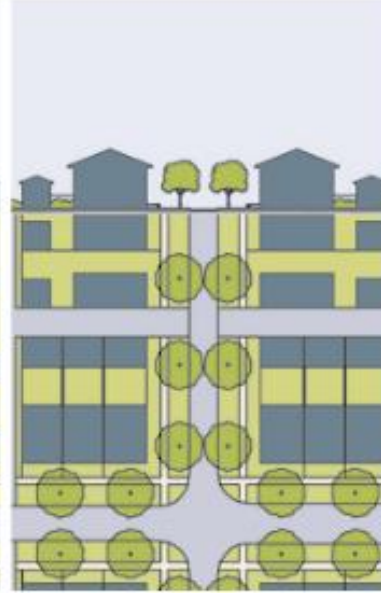
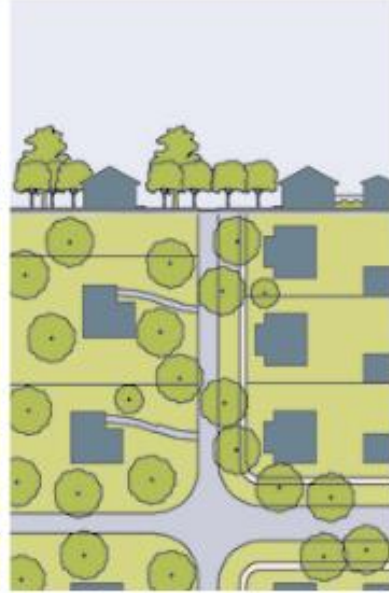
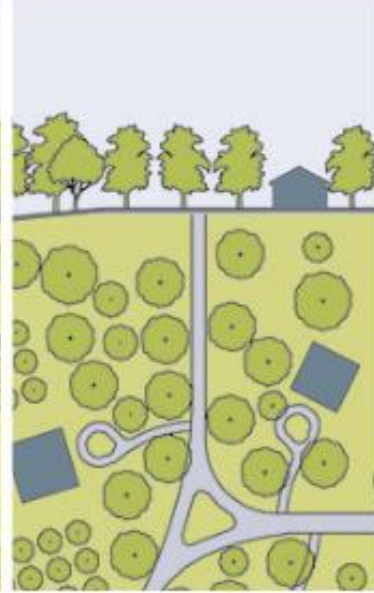
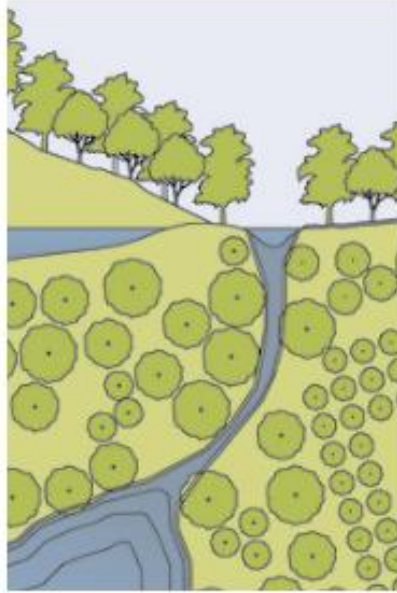
# FLORIDA TRANSECT

R U R A L I I I I I I I I I I I I I I I I I I I I T R A N S E C T I I I I I I I I I I I I I I I I I I I U R B A N

RURAL CONTEXT ZONES

URBAN CONTEXT ZONES

## DISTRICTS



**T1** Natural Zone

**T2 Rural Zone**

**T3** Sub-Urban Zone

**T4** General Urban Zone

**T5 Urban Center Zone**

**T6** Urban Core Zone

SD Special District



WETLANDS

FARMLAND

4TH AVENUE N.

5TH STREET S.

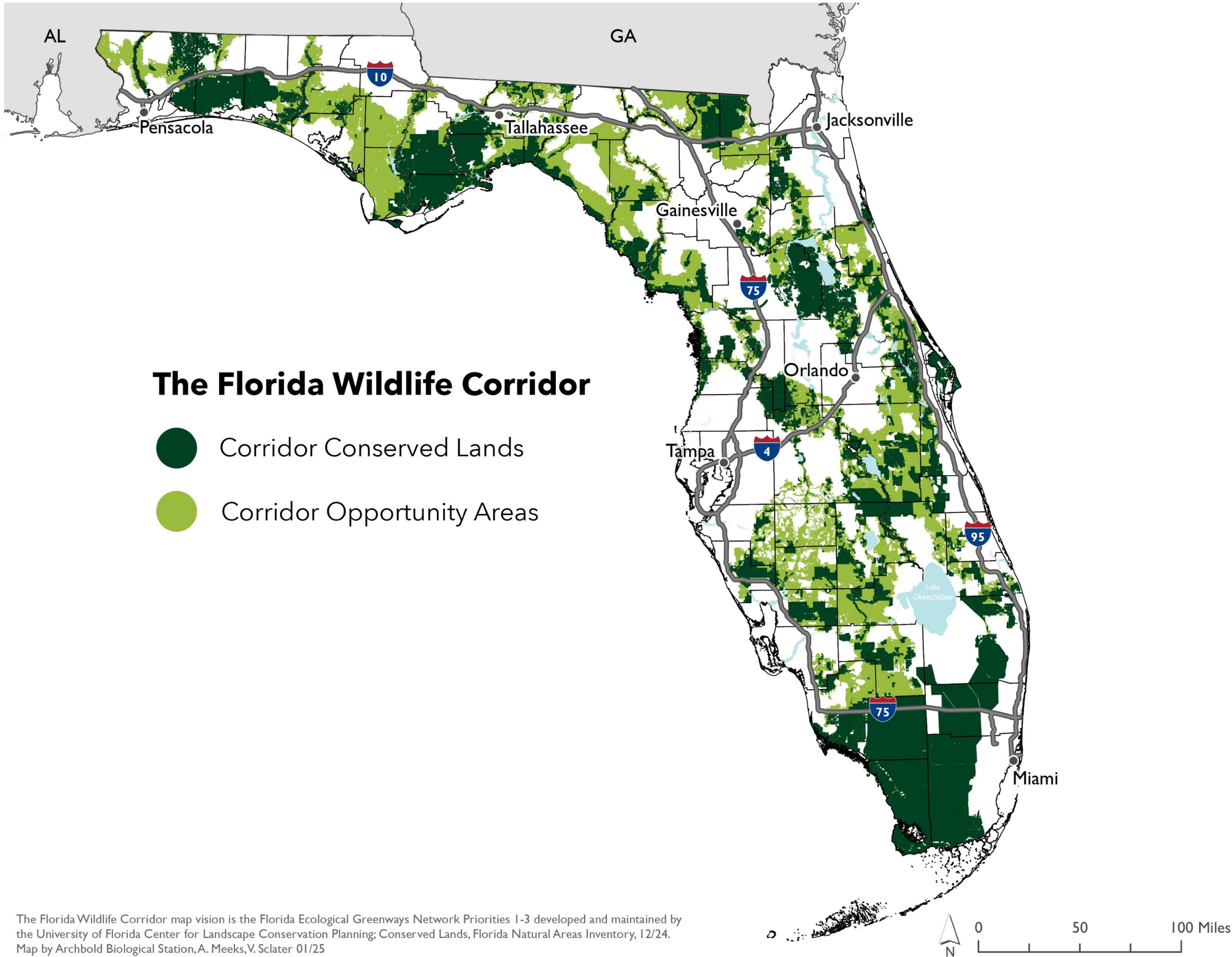
5TH AVENUE S.

MERCATO

APF



# FLORIDA WILDLIFE CORRIDOR



The Florida Wildlife Corridor map vision is the Florida Ecological Greenways Network Priorities 1-3 developed and maintained by the University of Florida Center for Landscape Conservation Planning; Conserved Lands, Florida Natural Areas Inventory, 12/24. Map by Archbold Biological Station, A. Meeks, V. Sclater 01/25









St. Augustine



St. Pete



Coral  
Gables

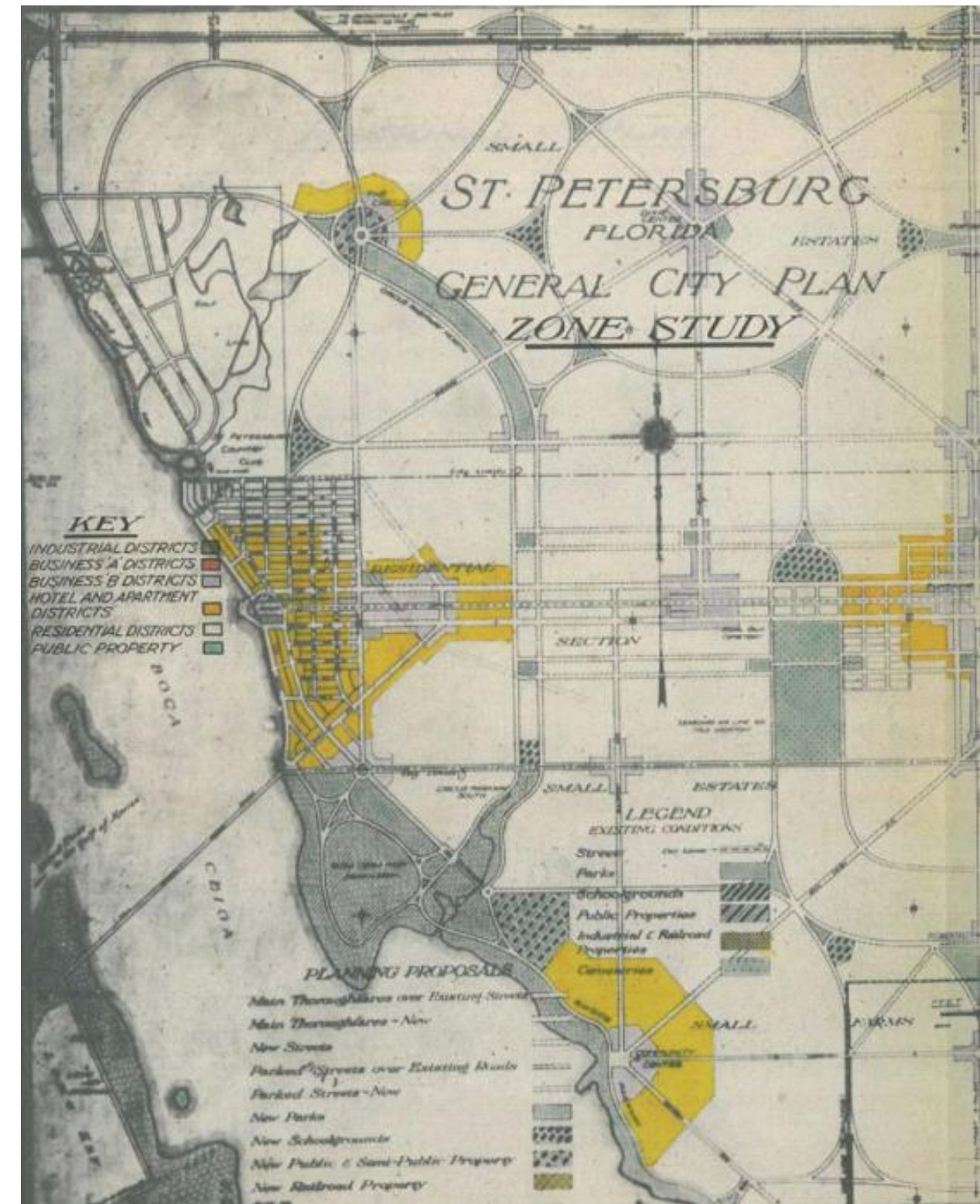


Winter  
Garden



“Florida is a great laboratory of town and city planning and building.  
Almost everything that is good and everything that is bad is to be seen  
here in the flesh.”

- John Nolen, Garden City Planner





# HOW FLORIDA HAS BEEN GROWING

## Drivable Sprawl vs. Complete Communities



The Florida Mall, Orlando

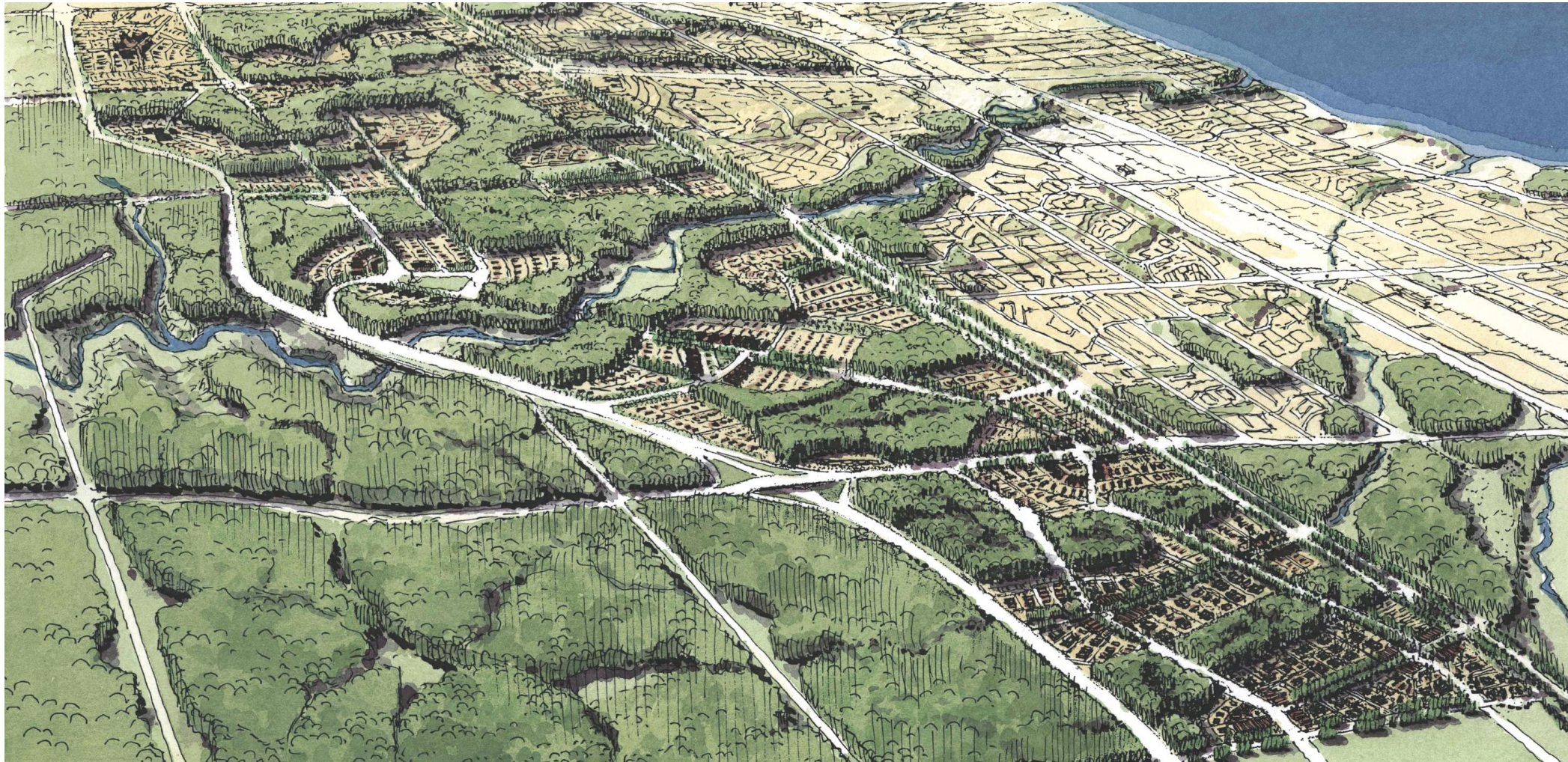


Winter Park



# NW HILLSBOROUGH COUNTY

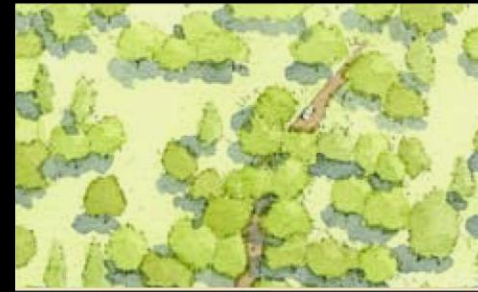
Preservation and Reservation Areas  
Urban and Neighborhood Centers





# SMARTCODE*e*

v 9.2



T1



T2



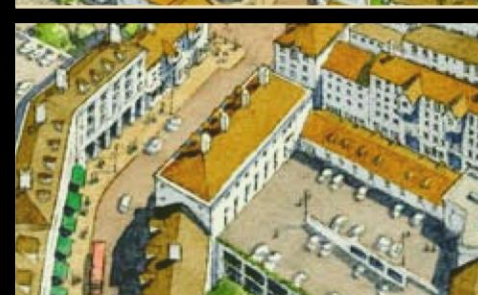
T3



T4

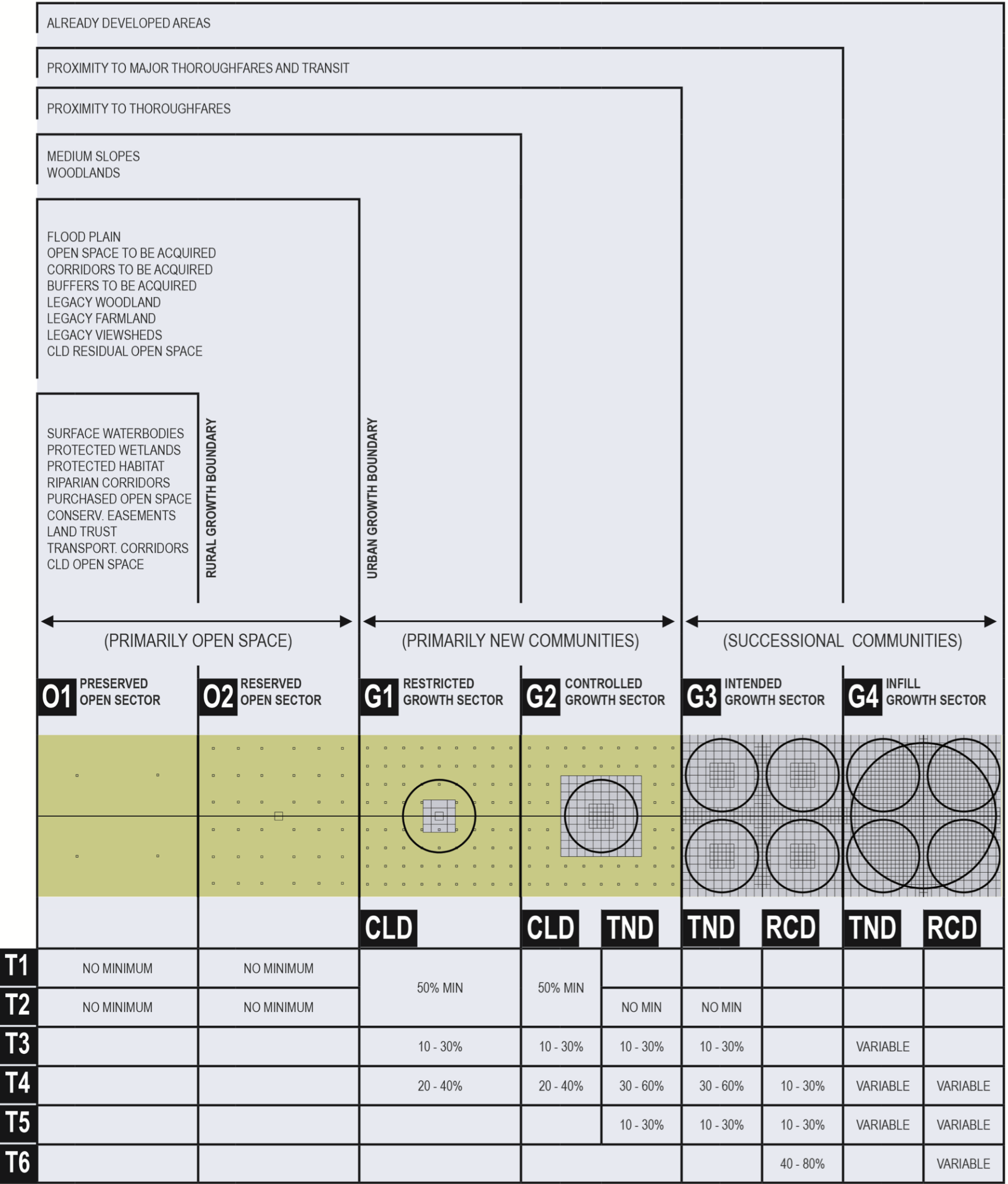


T5



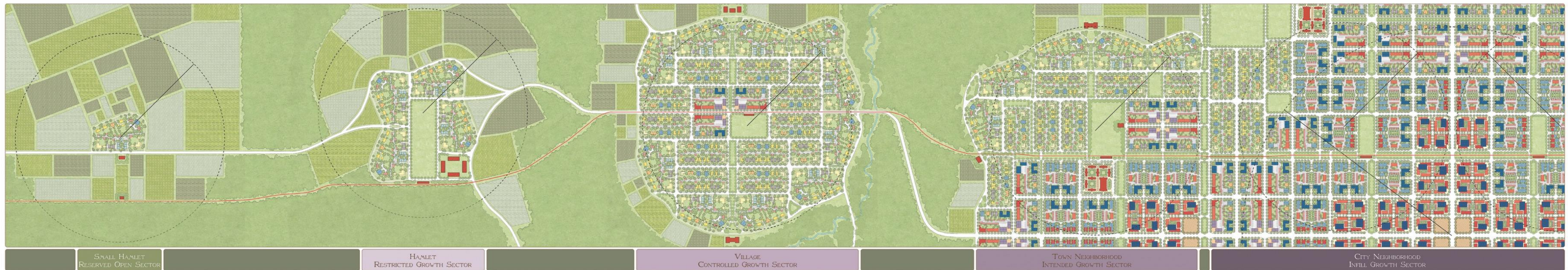
T6







# THE TRANSECT IN REGIONAL CONTEXT





|           |                                                                                                                                                                                                                                                                                                                               |                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>T1</b> | <b>T-1 NATURAL</b> consists of lands approximating or reverting to a wilderness condition, including lands unsuitable for settlement due to topography, hydrology or vegetation.                                                                                                                                              | <b>Building Type:</b><br><b>Building Placement:</b><br><b>Frontage Types:</b><br><b>Building Height:</b><br><b>Open Space:</b> | Natural landscape with some agricultural use<br>Not applicable<br>Not applicable<br>Not applicable<br>Farms, parks, greenways                                                                                                                                                                                                                                                                                                                                               |
| <b>T2</b> | <b>T-2 RURAL</b> consists of sparsely settled lands in open or cultivated states. These include woodland, agricultural land, grassland, and irrigable desert. Typical buildings are farmhouses, agricultural buildings, cabins, and villas.                                                                                   | <b>Building Type:</b><br><b>Building Placement:</b><br><b>Frontage Types:</b><br><b>Building Height:</b><br><b>Open Space:</b> | Primarily agricultural with woodland & wetland and scattered buildings<br>Variable setbacks<br>Not applicable<br>1- to 2-story<br>Parks, greenways                                                                                                                                                                                                                                                                                                                          |
| <b>T3</b> | <b>T-3 SUB-URBAN</b> consists of low density residential areas, adjacent to higher zones that some mixed use. Home occupations and outbuildings are allowed. Planting is naturalistic and setbacks are relatively deep. Blocks may be large and the roads irregular to accommodate natural conditions.                        | <b>Building Type:</b><br><b>Building Placement:</b><br><b>Frontage Types:</b><br><b>Building Height:</b><br><b>Open Space:</b> | Lawns, and landscaped yards surrounding detached single-family houses; pedestrians occasionally<br>Large and variable front and side yard setbacks<br>Porches, fences, naturalistic tree planting<br>1- to 2-story with some 3-story<br>Parks, greenways                                                                                                                                                                                                                    |
| <b>T4</b> | <b>T-4 GENERAL URBAN</b> consists of a mixed use but primarily residential urban fabric. It may have a wide range of building types: single, sideyard, and rowhouses. Setbacks and landscaping are variable. Streets with curbs and sidewalks define medium-sized blocks.                                                     | <b>Building Type:</b><br><b>Building Placement:</b><br><b>Frontage Types:</b><br><b>Building Height:</b><br><b>Open Space:</b> | Mix of houses, townhouses & small apartment buildings, with scattered commercial activity; balance between landscape and buildings; presence of pedestrians<br>Shallow to medium front and side yard setbacks<br>Porches, fences, dooryards<br>2- to 3-story with a few taller mixed use buildings<br>Squares, greens                                                                                                                                                       |
| <b>T5</b> | <b>T-5 URBAN CENTER</b> consists of higher density mixed use building that accommodate retail, offices, rowhouses and apartments. It has a tight network of streets, with wide sidewalks, steady street tree planting and buildings set close to the sidewalks.                                                               | <b>Building Type:</b><br><b>Building Placement:</b><br><b>Frontage Types:</b><br><b>Building Height:</b><br><b>Open Space:</b> | Shops mixed with townhouses, larger apartment houses, offices, workplace, and civic buildings; predominantly attached buildings; trees within the public right-of-way; substantial pedestrian activity<br>Shallow setbacks or none; buildings oriented to street defining a street wall<br>Stoops, shopfronts, galleries<br>3- to 5-story with some variation<br>Parks, plazas and squares, median landscaping                                                              |
| <b>T6</b> | <b>T-6 URBAN CORE</b> consists of the highest density and height, with the greatest variety of uses, and civic buildings of regional importance. It may have larger blocks; streets have steady street tree planting and buildings are set close to wide sidewalks. Typically only large towns and cities have an Urban Core. | <b>Building Type:</b><br><b>Building Placement:</b><br><b>Frontage Types:</b><br><b>Building Height:</b><br><b>Open Space:</b> | Medium to high-density mixed-use buildings, entertainment, civic and cultural uses. Attached buildings forming a continuous street wall; trees within the public right-of-way; highest pedestrian and transit activity<br>Shallow setbacks or none; buildings oriented to street, defining a street wall<br>Stoops, dooryards, forecourts, shopfronts, galleries, and arcades<br>4-plus story with a few shorter buildings<br>Parks, plazas and squares; median landscaping |

**A. COMMON YARD:** a planted Frontage wherein the Facade is set back substantially from the Frontage Line. The front yard created remains unfenced and is visually continuous with adjacent yards, supporting a common landscape. The deep Setback provides a buffer from the higher speed Thoroughfares.

**B. PORCH & FENCE:** a planted Frontage wherein the Facade is set back from the Frontage Line with an attached porch permitted to Encroach. A fence at the Frontage Line maintains street spatial definition. Porches shall be no less than 8 feet deep.

**C. TERRACE OR LIGHTWELL:** a Frontage wherein the Facade is set back from the Frontage line by an elevated terrace or a sunken Lightwell. This type buffers Residential use from urban Sidewalks and removes the private yard from public Encroachment. Terraces are suitable for conversion to outdoor cafes. Syn: Dooryard.

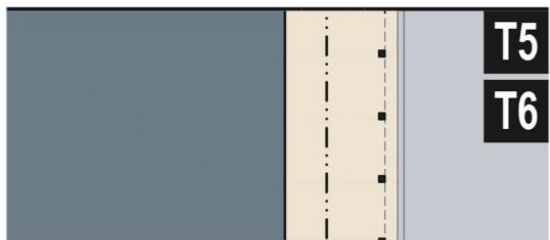
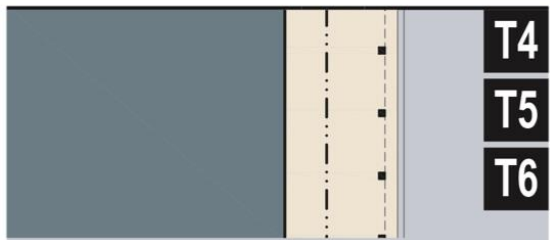
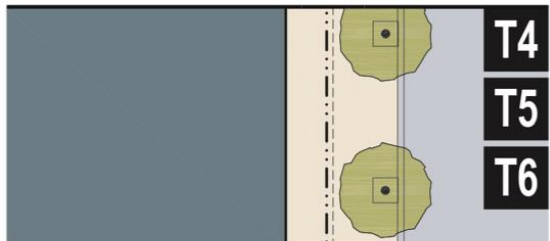
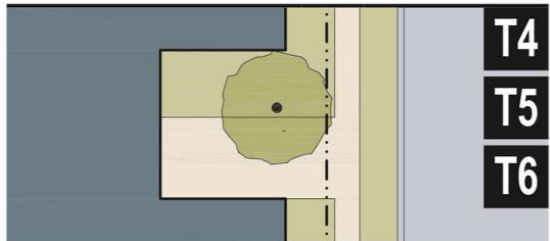
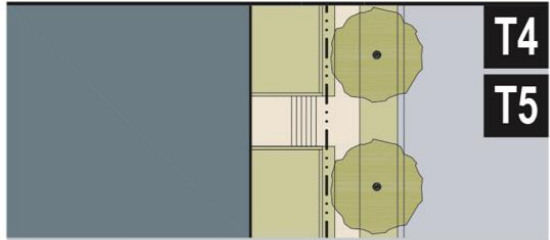
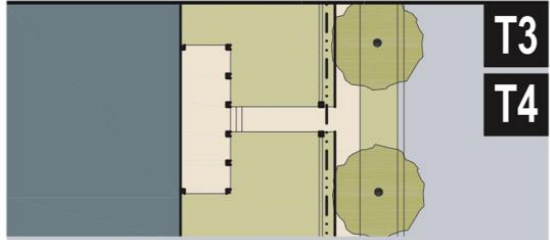
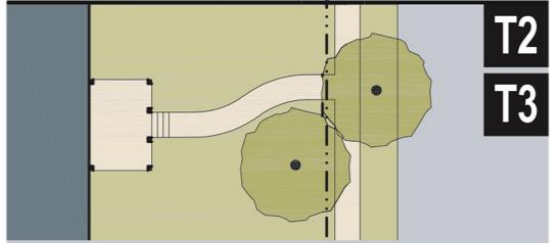
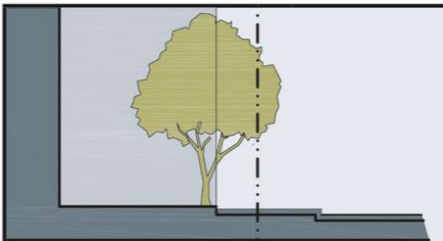
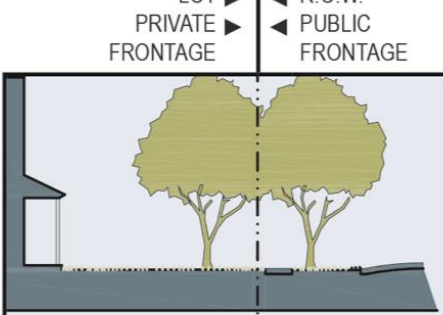
**D. FORECOURT:** a Frontage wherein a portion of the Facade is close to the Frontage Line and the central portion is set back. The Forecourt created is suitable for vehicular drop-offs. This type should be allocated in conjunction with other Frontage types. Large trees within the Forecourts may overhang the Sidewalks.

**E. STOOP:** a Frontage wherein the Facade is aligned close to the Frontage Line with the first Story elevated from the Sidewalk sufficiently to secure privacy for the windows. The entrance is usually an exterior stair and landing. This type is recommended for ground-floor Residential use.

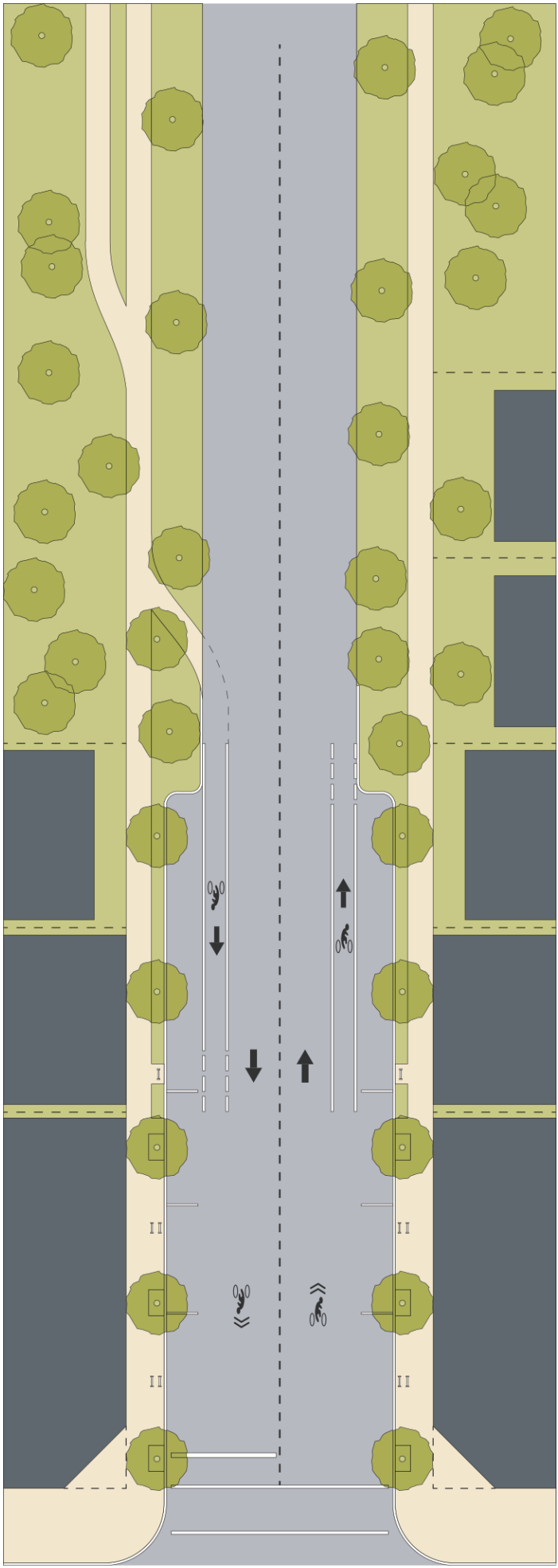
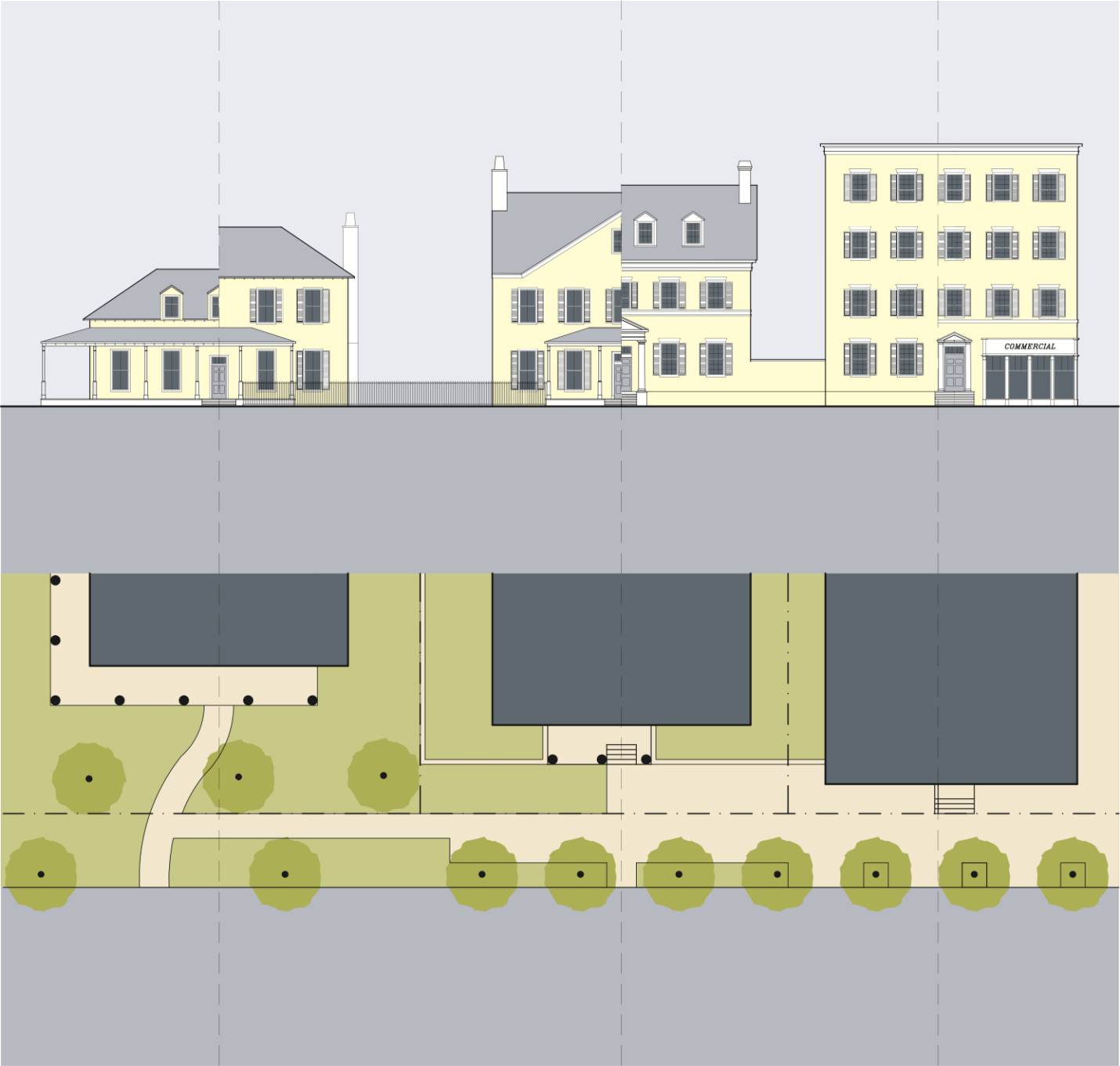
**F. SHOPFRONT:** a Frontage wherein the Facade is aligned close to the Frontage Line with the building entrance at Sidewalk grade. This type is conventional for Retail use. It has a substantial glazing on the Sidewalk level and an awning that may overlap the Sidewalk to within 2 feet of the Curb. Syn: Retail Frontage.

**G. GALLERY:** a Frontage wherein the Facade is aligned close to the Frontage line with an attached cantilevered shed or a lightweight colonnade overlapping the Sidewalk. This type is conventional for Retail use. The Gallery shall be no less than 10 feet wide and should overlap the Sidewalk to within 2 feet of the Curb.

**H. ARCADE:** a colonnade supporting habitable space that overlaps the Sidewalk, while the Facade at Sidewalk level remains at or behind the Frontage Line. This type is conventional for Retail use. The Arcade shall be no less than 12 feet wide and should overlap the Sidewalk to within 2 feet of the Curb. See Table 8.







|                                                                                             | T1                                                                                    | T2                                                                                    | T3                                                                                    | T4                                                                                    | T5                                                                                  | T6                                                                                  | SD |
|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----|
| POLE<br> |    |    |    |    |  |  |    |
| OV<br>   |    |    |    |    |  |  |    |
| BA<br>   |    |    |    |    |  |  |    |
| PY<br>  |  |  |  |  |                                                                                     |                                                                                     |    |
| UM<br> |  |  |  |  |                                                                                     |                                                                                     |    |
| VA<br> |  |  |  |  |                                                                                     |                                                                                     |    |



# SMARTCODE MODULES

FLOOD HAZARD MITIGATION  
SMARTCODE MODULE

PREPARED BY WILLIAM WRIGHT, BALCH & BINGHAM LLP

---

*Adapt or perish, now as ever, is nature's inexorable imperative.*

H. G. Wells

LIGHT LEVELS  
SMARTCODE MODULE

PREPARED BY DUANY PLATER-ZYBERK & CO.

---

*How beautiful is night!  
A dewy freshness fills the silent air;  
No mist obscures; nor cloud, nor speck, nor stain,  
Breaks the serene of heaven:  
In full-orbed glory, yonder moon divine  
Rolls through the dark blue depths;  
Beneath her steady ray  
The desert circle spreads  
Like the round ocean, girdled with the sky.  
How beautiful is night!*

Robert Southey

FIRE MITIGATION  
IN THE WILDLAND URBAN INTERFACE  
SMARTCODE MODULE

PREPARED BY DREILING TERRONES ARCHITECTURE, MARTIN DREILING

---

*To study fire is to inquire into one of the informing processes of the earth. To manage fire is to perform one of the defining acts of human beings. That, distilled, is the sufficient and necessary reason to understand fire.*

Steve Pyne  
1996

REGIONAL WATERSHEDS  
SMARTCODE MODULE

PREPARED BY PAUL CRABTREE, PE • CRABTREE GROUP, INC.

---

*Don't you realize that the sea is the home of water?  
All water is off on a journey unless it's in the sea,  
and it's homesick, and bound to make its way home someday.*

Zora Neale Hurston



# FIRE MITIGATION IN THE WILDLAND URBAN INTERFACE SMARTCODE MODULE

PREPARED BY DREILING TERRONES ARCHITECTURE, MARTIN DREILING

*To study fire is to inquire into one of the informing processes of the earth. To manage fire is to perform one of the defining acts of human beings. That, distilled, is the sufficient and necessary reason to understand fire.*

Steve Pyne  
1996

SMARTCODE MODULE

TABLE FM-1: COMMON ZONE OF DEFENSE  
FUEL TREATMENT

|                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>a. Common Zone of Defense: Forest Land Fuel Types</b><br>      | <b>Fuel Treatment shall be implemented as follows:</b> <ul style="list-style-type: none"><li>• Understory treatment throughout the Zone of Defense</li><li>• tree reduction or removal in the Critical Zone</li><li>• conversion to agriculture in the Critical Zone</li><li>• trees shall be permitted in the Critical Zone and within the development area when Ladder Fuels are managed.</li></ul>                                                              |
| <b>b. Common Zone of Defense: Scrub / Brushland Fuel Type</b><br> | <b>Fuel Treatment shall be implemented as follows:</b> <ul style="list-style-type: none"><li>• Fuel reduction throughout the Zone of Defense</li><li>• conversion to agriculture in the Critical Zone</li><li>• trees shall be prohibited in the Critical Zone</li><li>• trees shall be permitted within the development area when Ladder Fuels and Crown Fuels are managed.</li></ul>                                                                             |
| <b>c. Common Zone of Defense: Grassland Fuel Type</b><br>         | <b>Fuel Treatment shall be implemented as follows:</b> <ul style="list-style-type: none"><li>• Fuel Reduction and Fuel Management throughout Zone of Defense</li><li>• conversion to agriculture in the Critical Zone</li><li>• trees shall be permitted in Critical Zone and within the development area when Ladder Fuels are managed</li><li>• Critical Zone may be reduced by Warrant via inclusion of walls, grade breaks, and other barriers.</li></ul>      |
| <b>d. Common Zone of Defense: Slope Issues</b><br>                | <ul style="list-style-type: none"><li>• Where topography includes slopes, draws, canyons and other features that focus wind effects, the Zone of Defense shall be increased.</li><li>• Development shall be prohibited on slopes, and limited to benches, ridges and other locations where fire fighting in the Critical Zone is facilitated.</li><li>• Within development, Fuel sources shall be reduced at edges adjacent to increased Zone of Defense</li></ul> |
| <b>e. Common Zone of Defense: Climate Issues</b><br>              | <ul style="list-style-type: none"><li>• Where prevailing winds (during fire season) coincide with wildland Fuel sources, the Zone of Defense shall be increased.</li><li>• The reduced Fuel zone shall be limited to grasses or agrarian production.</li><li>• Within development, Fuel sources shall be reduced at edges adjacent to the increased Zone of Defense (see diagram).</li></ul>                                                                       |

SMARTCODE MODULE

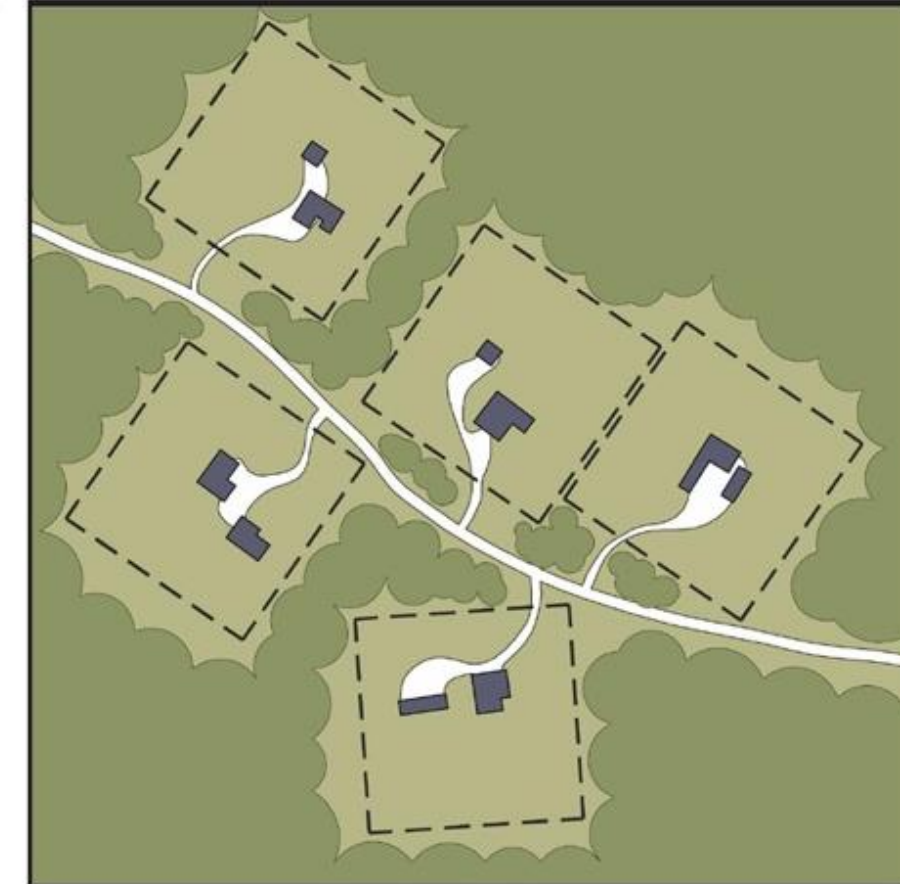
TABLE FM-2: COMMON ZONE OF DEFENSE  
COMMUNITY SCALE PATTERNS

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>a. Prohibited Pattern: Conventional Sprawl</b><br><ul style="list-style-type: none"><li>• Conventional sprawl patterns shall not be permitted that generate redundant Zones of Defense, increased building spacing, and/or complex fire fighting situations.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| <b>b. Individual Buildings, Compounds, Farmsteads, Agricultural / Stewardship, Proto-Hamlets:</b><br><ul style="list-style-type: none"><li>• Zones of Defense shall be provided around single structures.</li><li>• Multiple structures shall be clustered <a href="#">per this Table, items b, c, and d.</a></li><li>• Common Zones of Defense shall be provided around clusters of multiple structures.</li><li>• Structures shall be located close enough to public Thoroughfares for direct fire fighting access.</li><li>• Zones of Defense shall be contiguous with public Thoroughfares.</li><li>• Multiple buildings and compounds under separate ownership shall be located in close proximity to each other to reduce the total quantity of individual Zones of Defense and to initiate development patterns that favor emergent CLD development. In such cases, Zones of Defense may overlap.</li></ul> |  |
| <b>c. CLD with Common Zone of Defense:</b><br><ul style="list-style-type: none"><li>• For CLD Community Unit types, Common Zones of Defense shall be provided to isolate development from Fire Hazard Severity Zones. See Section 3.3.X.</li><li>• Common Zones of Defense shall provide adequate isolation from likely wildfire threats via distance, Fuel Treatment and fire fighting access, such that resulting development shall be regulated by this Code and <a href="#">the local Building Codes</a> and shall not require more restrictive regulation in response to proximity to Fire Hazard Severity Area.</li></ul>                                                                                                                                                                                                                                                                                    |  |
| <b>d. Common Zone of Defense at Edge of TND; Agrarian Urban Interface (AUI):</b><br><ul style="list-style-type: none"><li>• For TND Community Unit types, Common Zones of Defense shall isolate development from Fire Hazard Severity Zones.</li><li>• Common Zones of Defense shall extend between relevant edges of TND and the Fire Hazard Severity Zone.</li><li>• WUI shall be converted to AUI, thus separating wildland fire fighting requirements from urban fire fighting requirements.</li><li>• Farmsteads and related agrarian compounds may occur within the Agrarian Urban Interface per item b. above.</li></ul>                                                                                                                                                                                                                                                                                    |  |



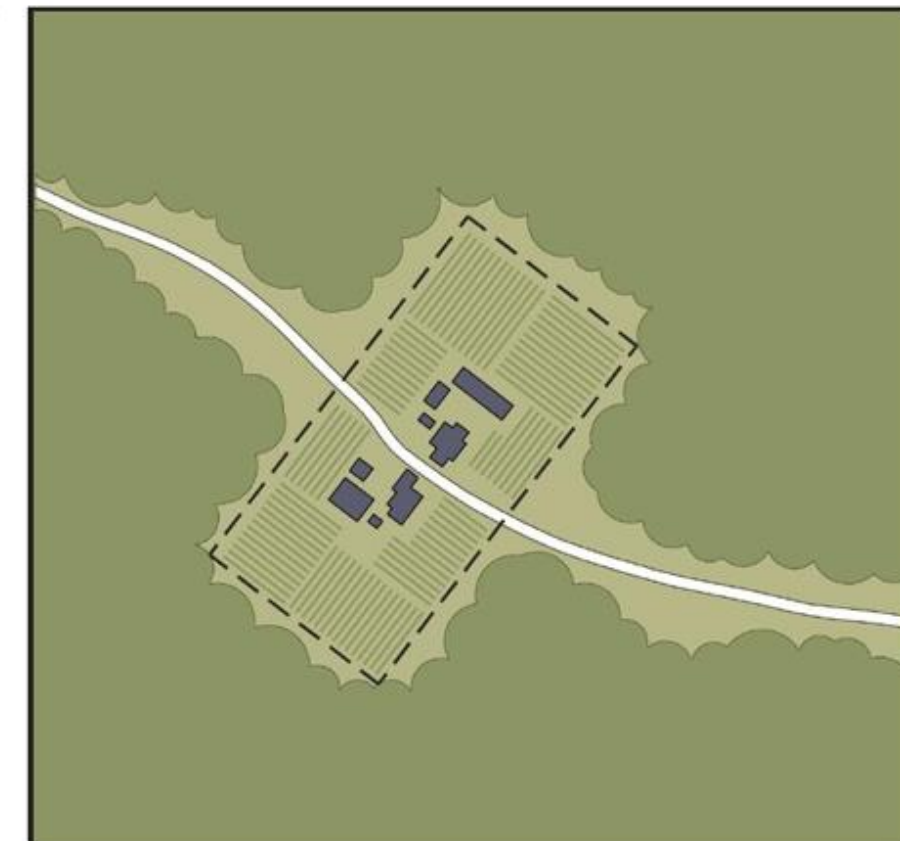
### a. Prohibited Pattern: Conventional Sprawl

- Conventional sprawl patterns shall not be permitted that generate redundant Zones of Defense, increased building spacing, and/or complex fire fighting situations.



### b. Individual Buildings, Compounds, Farmsteads, Agricultural / Stewardship, Proto-Hamlets:

- Zones of Defense shall be provided around single structures.
- Multiple structures shall be clustered [per this Table, items b, c, and d.](#)
- Common Zones of Defense shall be provided around clusters of multiple structures.
- Structures shall be located close enough to public Thoroughfares for direct fire fighting access.
- Zones of Defense shall be contiguous with public Thoroughfares.
- Multiple buildings and compounds under separate ownership shall be located in close proximity to each other to reduce the total quantity of individual Zones of Defense and to initiate development patterns that favor emergent CLD development. In such cases, Zones of Defense may overlap.





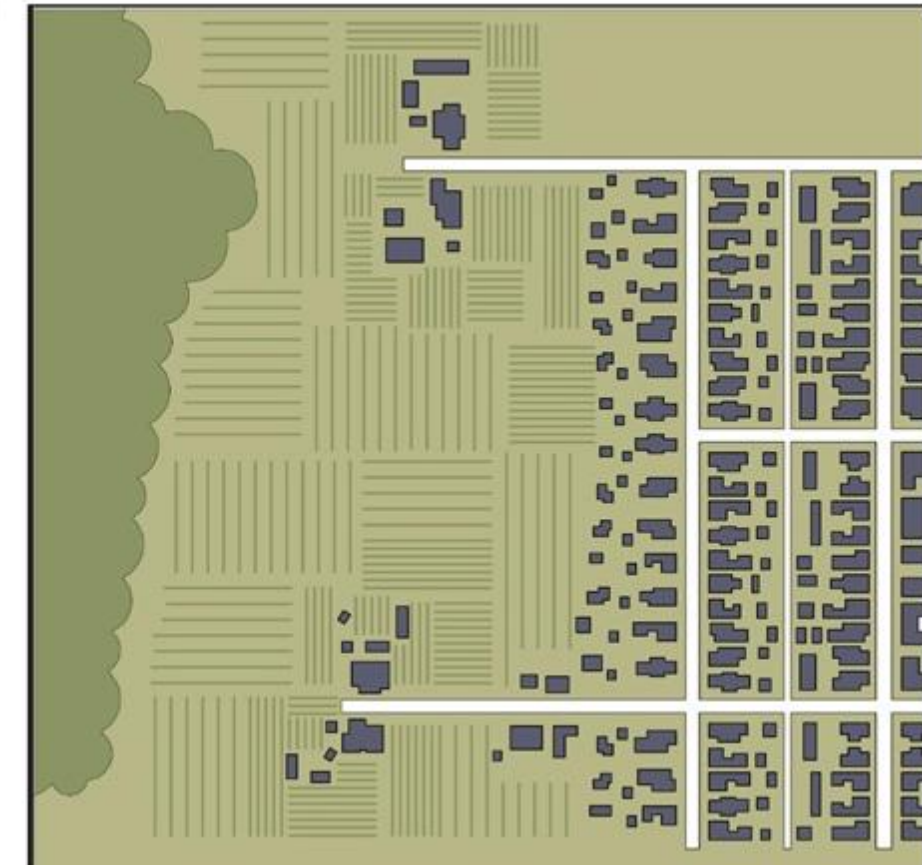
**c. CLD with Common Zone of Defense:**

- For CLD Community Unit types, Common Zones of Defense shall be provided to isolate development from Fire Hazard Severity Zones. See Section 3.3.X.
- Common Zones of Defense shall provide adequate isolation from likely wildfire threats via distance, Fuel Treatment and fire fighting access, such that resulting development shall be regulated by this Code and [the local Building Codes](#) and shall not require more restrictive regulation in response to proximity to Fire Hazard Severity Area.



**d. Common Zone of Defense at Edge of TND; Agrarian Urban Interface (AUI):**

- For TND Community Unit types, Common Zones of Defense shall isolate development from Fire Hazard Severity Zones.
- Common Zones of Defense shall extend between relevant edges of TND and the Fire Hazard Severity Zone.
- WUI shall be converted to AUI, thus separating wildland fire fighting requirements from urban fire fighting requirements.
- Farmsteads and related agrarian compounds may occur within the Agrarian Urban Interface per item b. above.





# COMMON TRANSECT VIOLATIONS

- Urban elements in rural or natural areas
- Suburban elements disrupting urban places
- Uniform standards regardless of context
- Fragmentation and loss of connectivity
- Failure to calibrate locally

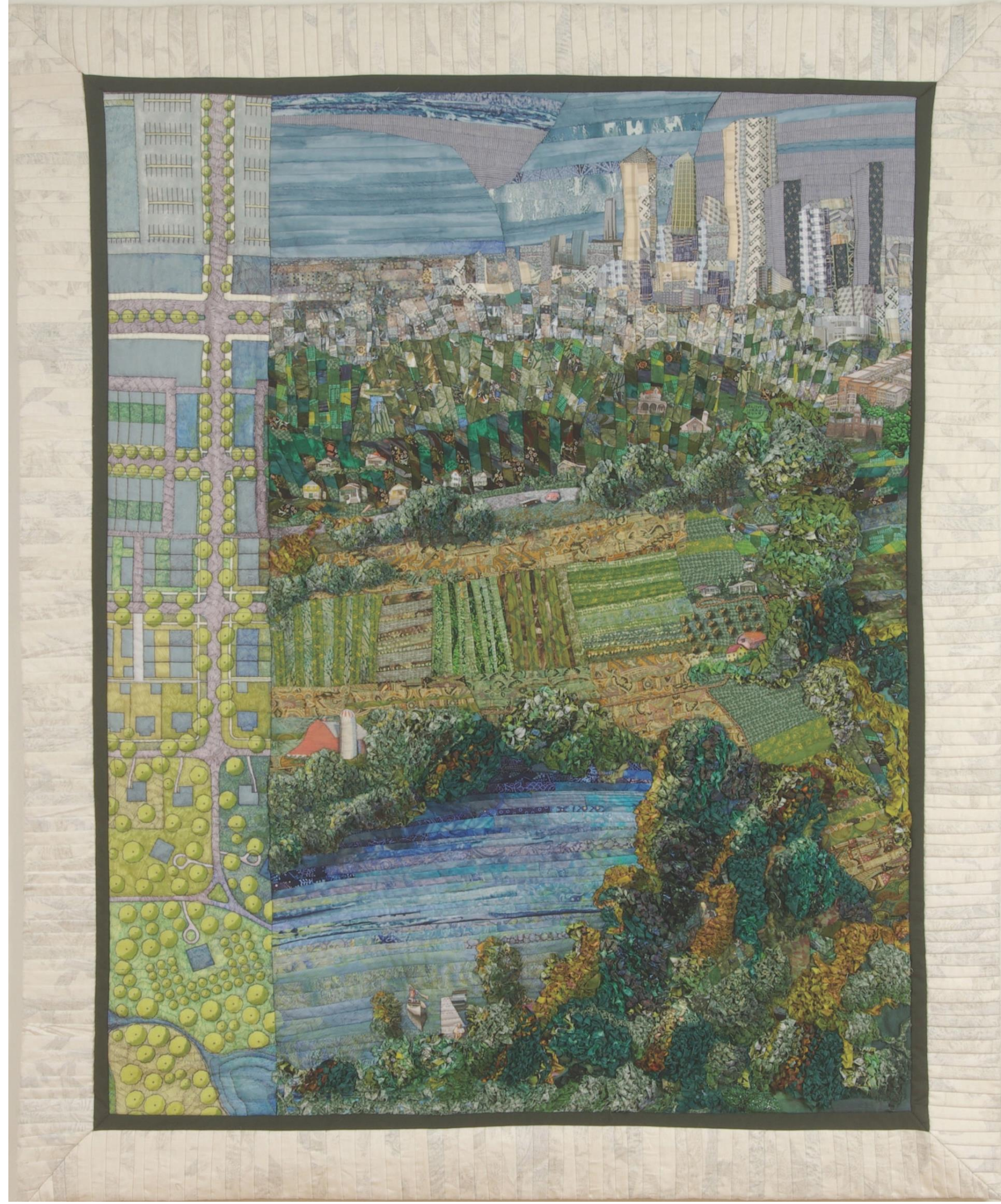


# LESSONS FOR AN ECOLOGICAL VALUES TRANSECT

- Think in continuums, not binaries
- Match interventions to context
- Protect transitions and connectivity
- Preserve diversity; avoid monocultures
- Calibrate locally, as one size does not fit all

**THE TRANSECT TEACHES US THAT DIVERSITY, CONNECTIVITY,  
AND CONTEXT CREATE RESILIENT HUMAN AND NATURAL  
ENVIRONMENTS**





Karen Reese Tunnell 2009





# Planning to Protect the Florida Wildlife Corridor 3.0

## Beyond the Corridor: Transect Planning and Connectivity

### The Ecological Transect As A Design Perspective

Jay H. Exum, Ph.D.  
Exum Associates, Inc,

1000 Friends of Florida  
University of Florida  
Center for Landscape Conservation Planning  
September 23, 2026





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# Ecological Transect

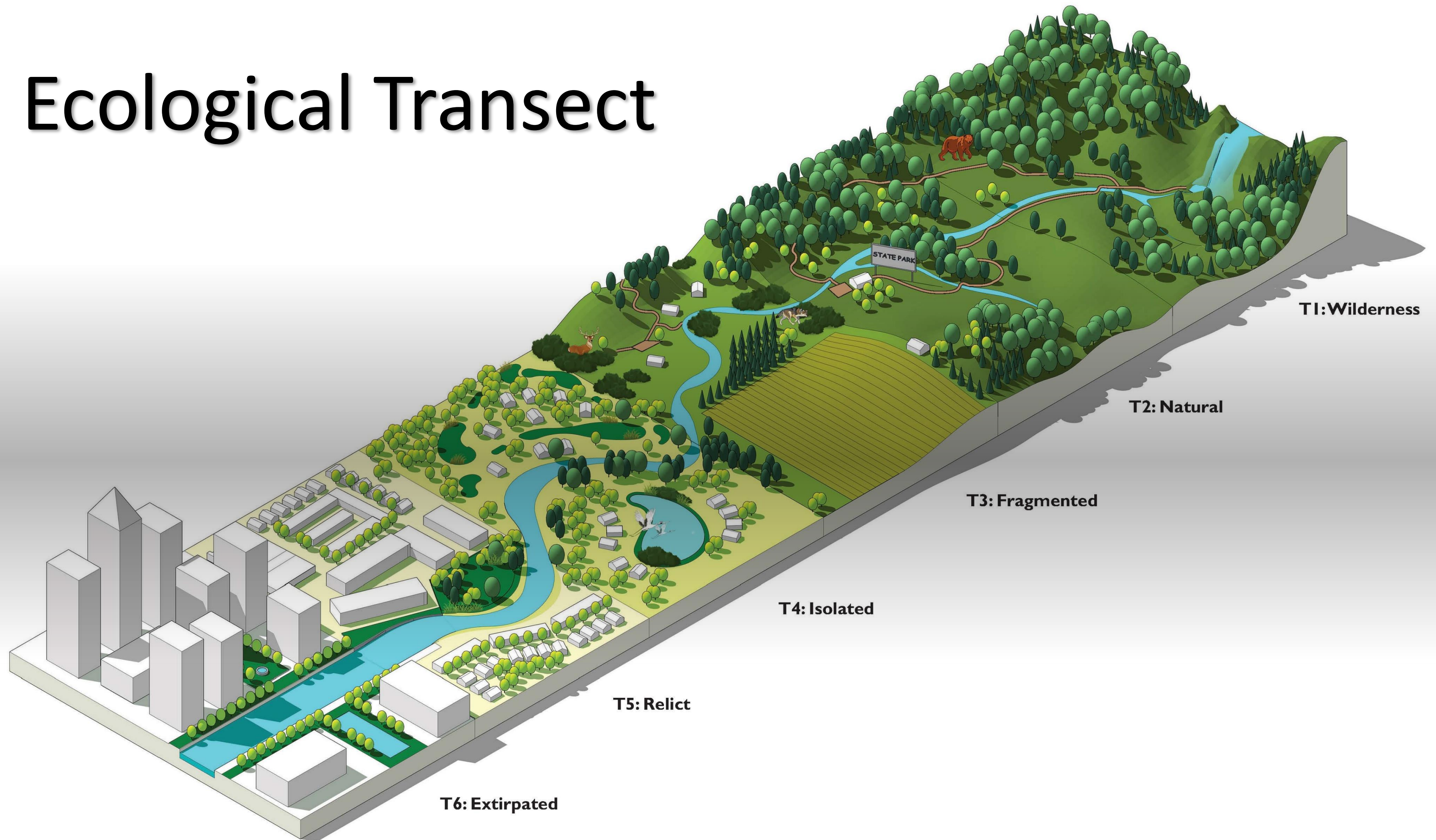
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Consider an ecological basis for planning and design as an alternative to the Urban Transect concept

- Focus on ecological benefits
- Use natural systems and biological diversity as the transect metrics



# Ecological Transect





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# Ecological Transect

---

Flip the context to Biocentric:

T1: **Wilderness** (Rural Preserve)

T2: **Natural** (Rural Reserves)

T3: **Fragmented** (Sub-Urban)

T4: **Isolated** (General Urban)

T5: **Relict** (Urban Center)

T6: **Extirpated** (Urban Core)



---

# Ecological Transect

---

The two transects have a convergent purpose related to the environment:

- Minimize the human footprint to maximize conservation of natural resources



---

# Ecological Transect

---

## General Design Themes:

Wilderness – *Ecologically Pristine*

Natural – *Ecologically Diverse*

Fragmented – *Ecologically Restorable*

Isolated – *Ecologically Inclusive*

Relict – *Ecologically Relatable*

Extirpated – *Ecologically Benign*

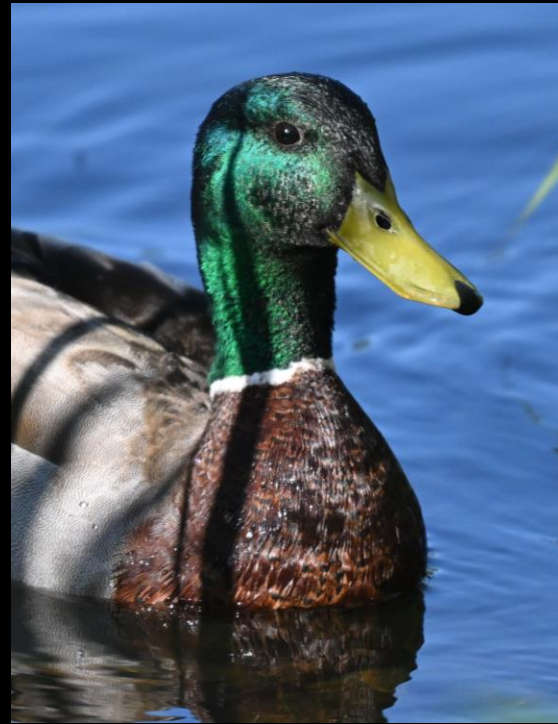


# Wildlife representative of each location along the Ecological Transect

---



T6-Pigeon



T5 - Mallard



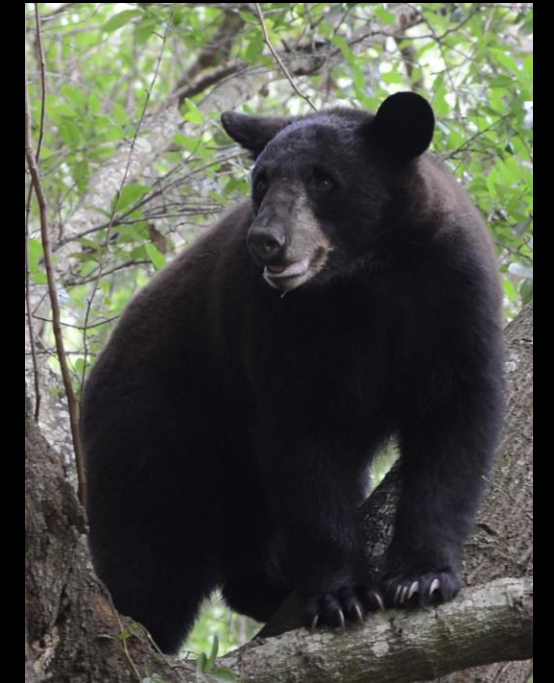
T4 - Red-eyed  
Vireo



T3 - Fox  
Squirrel



T2 - Bobcat



T1 - Black Bear



---

# Ecological Transect

---

## Protocol for each location on the Ecological Transect

- Biodiversity characteristics
- Resource objectives
- Design considerations
- Comp Plan/Land Development Code concepts



## T5 Characteristics:

- Individual occurrences of native (primarily canopy) species
- Used by urban-adapted or migratory wildlife
- Stormwater ponds with potential for aquatic species diversity





## T5 - Relict (Urban Center):

---

### Resource Objective:

- Protect/celebrate ecological linkages that extend outward from T6 and T5, e.g. lakes and streams
  - Prevent downstream impacts from water quality degradation and altered flow rates in rivers and streams
  - Where possible, manage aquatic systems for native biodiversity
- 

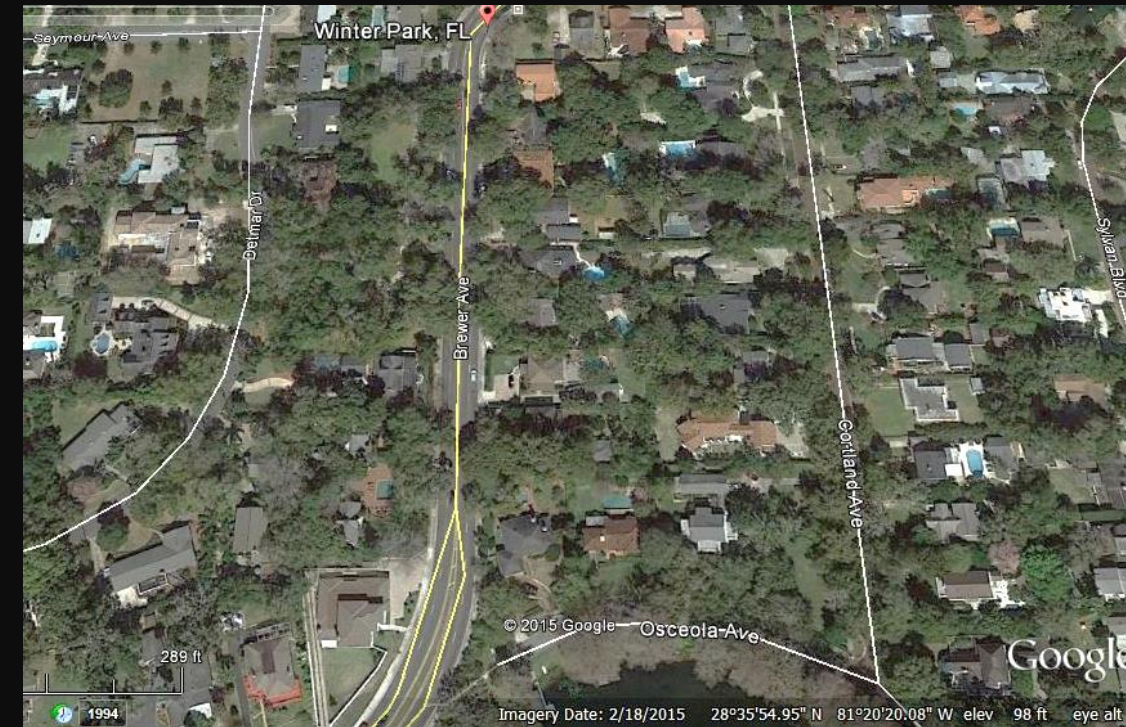




## T5 - Relict:

### Design Considerations:

- Buffer and restore habitat to embedded or adjacent aquatic or wetland systems
- Invest in water quality enhancement projects
- Use long-lived, native canopy species





## T5 Concepts for Comp Plan/Code changes:

---

- Restrict fertilizer use near water bodies
- Approve canopy species for new projects
- Incentivize stormwater retrofit
- Restrict water use for irrigation





## T5 Potential Outcomes/Benefits

---



An urban-adapted, but diverse aquatic ecosystem



## T5 Potential Outcomes/Benefits

---



Protected river corridors; bird diversity including urban predators; exposure to nature in parks, zoos, and science centers



## T3 Characteristics:

- Larger, marginally connected strands of natural habitat
- Scattered, functional, agricultural lands
- A diversity of plants and animals with unique habitat requirements and larger home ranges





## T3 - Fragmented (Sub-Urban) – includes agricultural lands:

### Resource Objectives:

- Protect natural systems from impacts from adjacent urban lands
- Sustain or restore natural hydrology
- Control invasive species
- Integrate conservation benefits from agricultural lands

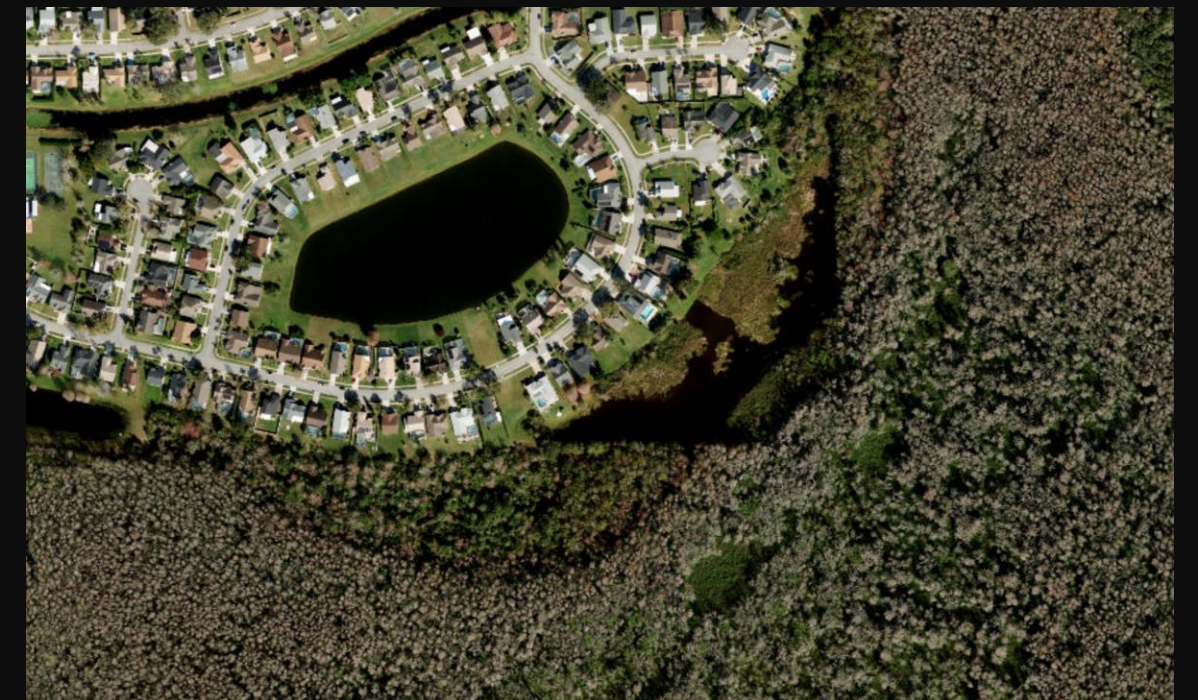




## T3 - Fragmented:

### Design Considerations:

- Provide long-term stability for ag businesses (e.g. Conservation Easements)
- Prevent further fragmentation of conservation lands
- Incorporate preserved areas on working lands as a part of regional conservation linkages
- Sustain wetland habitat in stormwater systems adjacent to conservation lands





## T3 Concepts for Comp Plan/Code changes:

---

- Protect rural lands
- Identify important conservation lands
- Require enhanced stormwater and effluent treatment
- Minimize groundwater wells





## T-3 Potential Outcomes/Benefits

---



Wildlife thrives on ag lands and at the urban interface, stormwater ponds provide habitat that transition to landscape corridors, natural systems are buffered from urban densities



# T1 Characteristics:

---

- Occupied by native biological diversity including apex predators
- Limited paved roads
- Natural ecological processes operating at a landscape scale





# T1 - Wilderness (Rural Preserve):

## Resource objectives:

- Implement long-term management to sustain natural diversity
- Allow for natural processes such as fire and flood, disease outbreak, etc.
- Promote deep nature experiences





# T1 - Wilderness:

## Design Considerations:

- Acquire/protect intact natural areas
- Manage for historic biodiversity
- Provide access and a well-planned trail system
- Monitor human activities and rectify causes of natural resource impacts





## T1 Concepts for Comp Plan/Code changes:

---

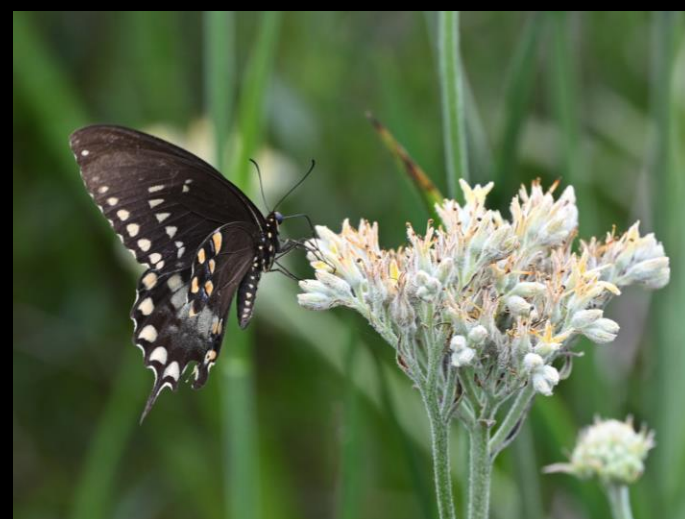
- Use Comp Plan policies and Future Land Use to prevent dense development within or adjacent to T1
- Identify conservation lands to be acquired
- Create a local funding source for land acquisition and protection
- Establish partnerships for these objectives





## T1 Potential Outcomes/Benefits

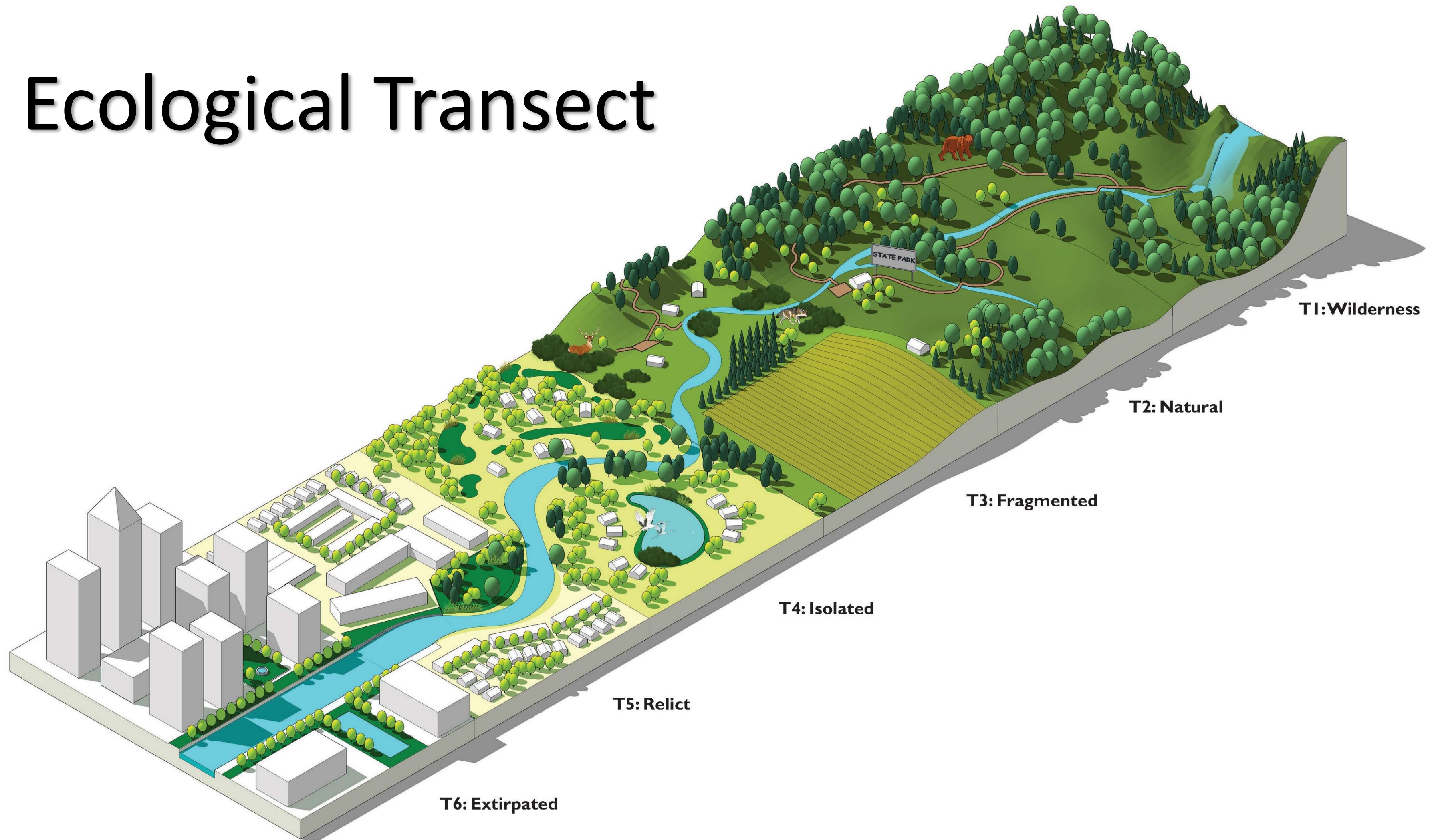
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Diverse ecosystems with wide-ranging species, high biological diversity, natural processes, and wilderness experiences



# Ecological Transect



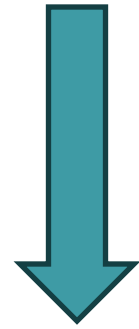


# Integrating Wildlife Habitat Connectivity into Local Land Use Planning

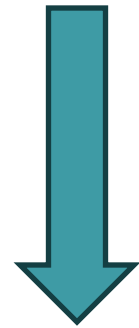
**Kylie Paul**  
[kylie@largelandscapes.org](mailto:kylie@largelandscapes.org)



**Transect planning**



**Ecological Values**



**Habitat Connectivity**

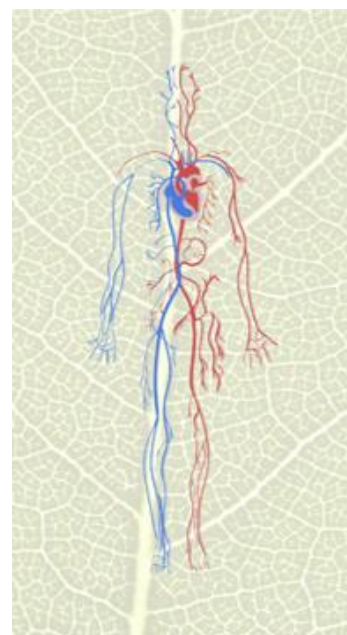




# Ecological Connectivity

The unimpeded movement of species and the flow of natural processes that sustain life on Earth

## Circulatory System of Nature



*Wildlife need:*

- Food
- Water
- Safety
- Mates
- Seasonal movements

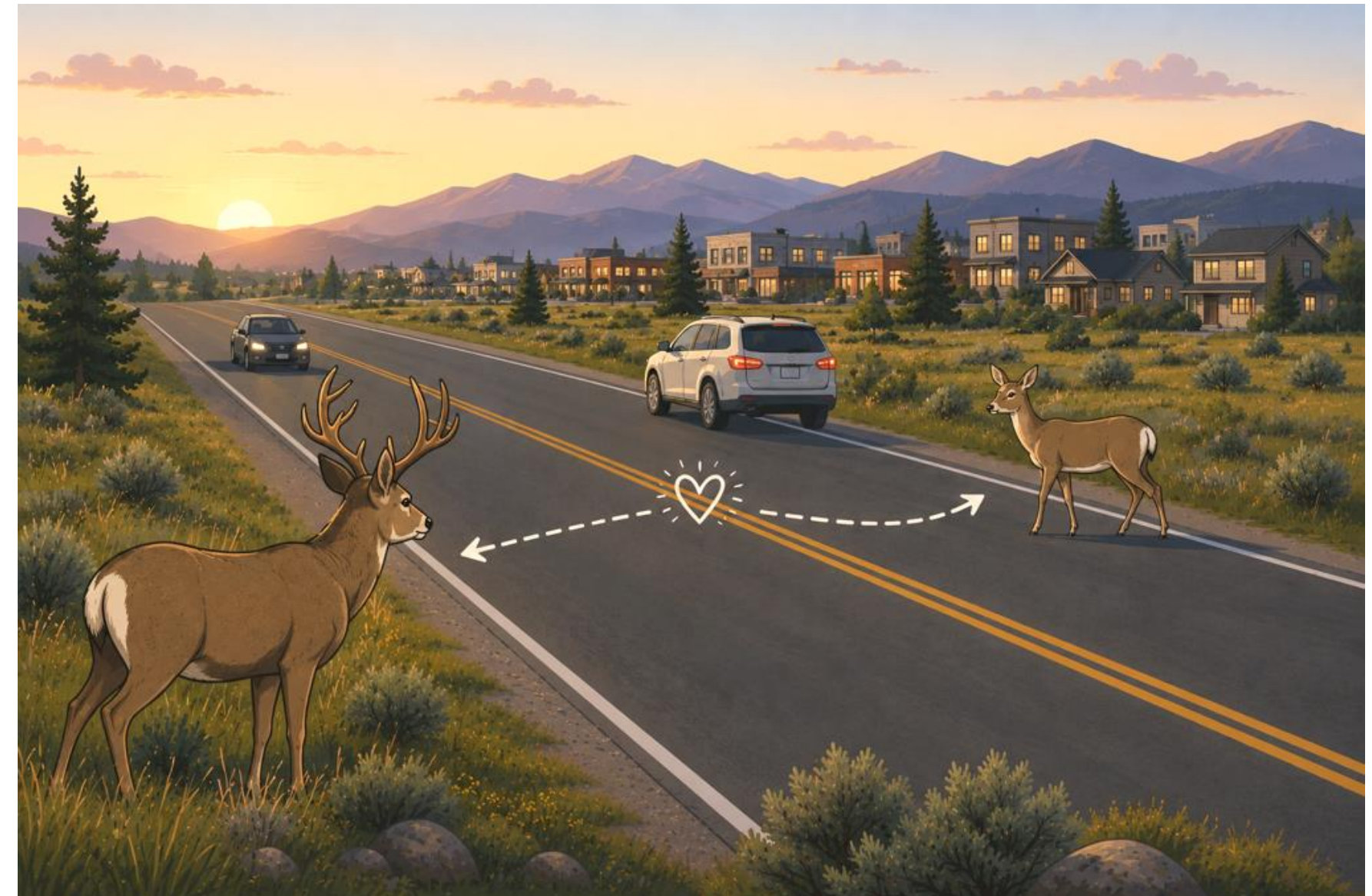


Image: AI robots

## WILDLIFE NEED TO MOVE



# Challenges for Nature and Wildlife

- More people
- More roads, railroads, powerlines, etc.
- More housing
- Less undeveloped land
- Shrinking pockets of interconnected open space
- Habitat fragmentation



Credit: National Park Service



# The Public Cares about Nature and Wildlife

148+ million Americans participated in wildlife watching in 2022

*U.S. Fish & Wildlife Service's 2022 National Survey*

89% of Floridians value conserving Florida's natural resources as the state grows so future generations can enjoy its natural beauty.

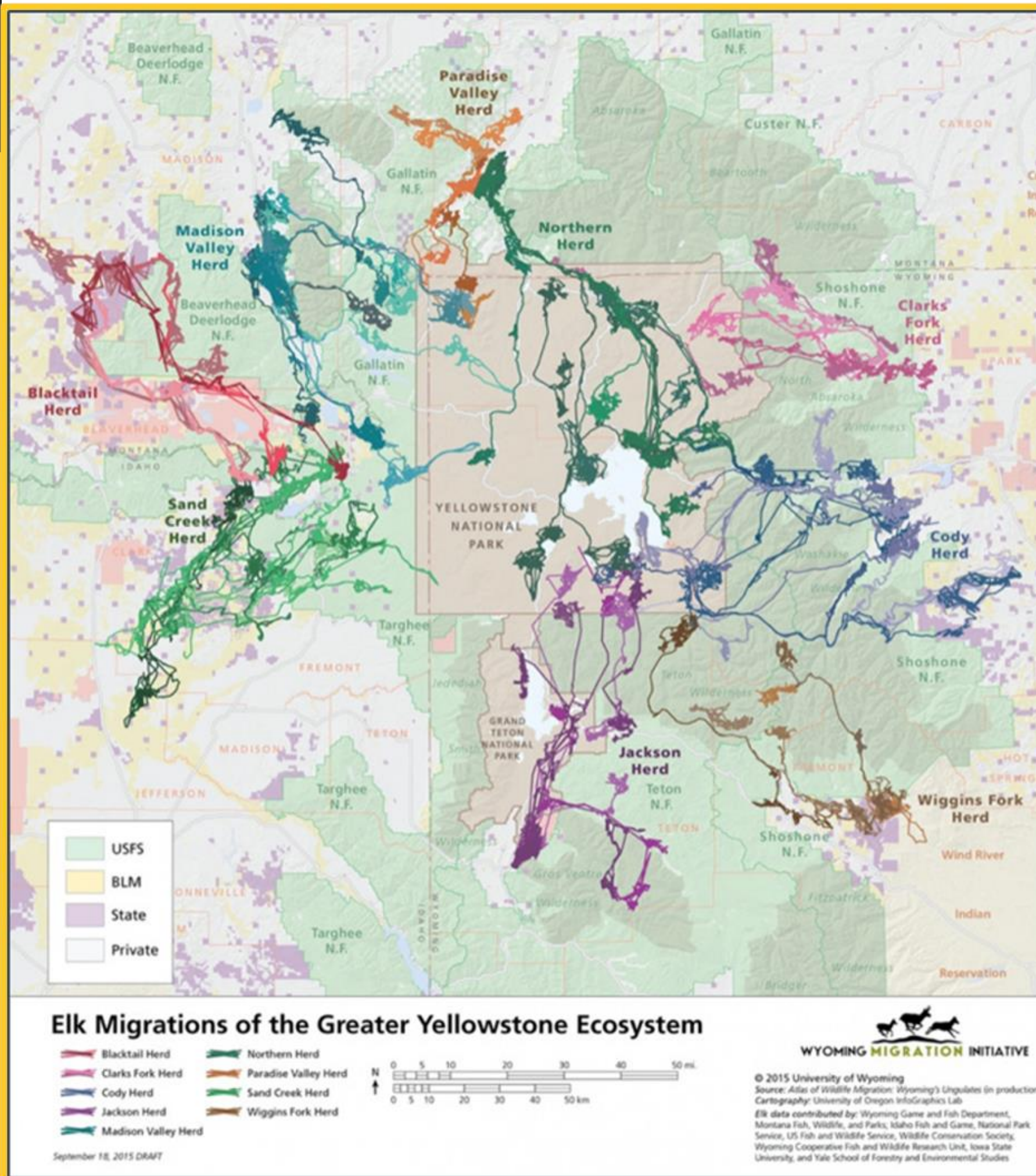
*2024 survey by Florida Atlantic University Business and Economics Polling Initiative + NPCA*

More than 84% of Westerners are concerned that the following issues are serious problems: **Loss of natural areas; Loss of habitat for fish and wildlife; Population declines of fish and wildlife**

*2026 bipartisan poll by New Bridge Strategy, FM3Research, and Colorado College*







# Connected Habitats

Public lands – wildlife move outside the box

Wildlife of all sizes need to move around and through our human-dominated landscapes





# Connected and Permeable Areas

Wildlife corridors, linkage areas, pathways, movement areas, habitat connectors, stepping stones

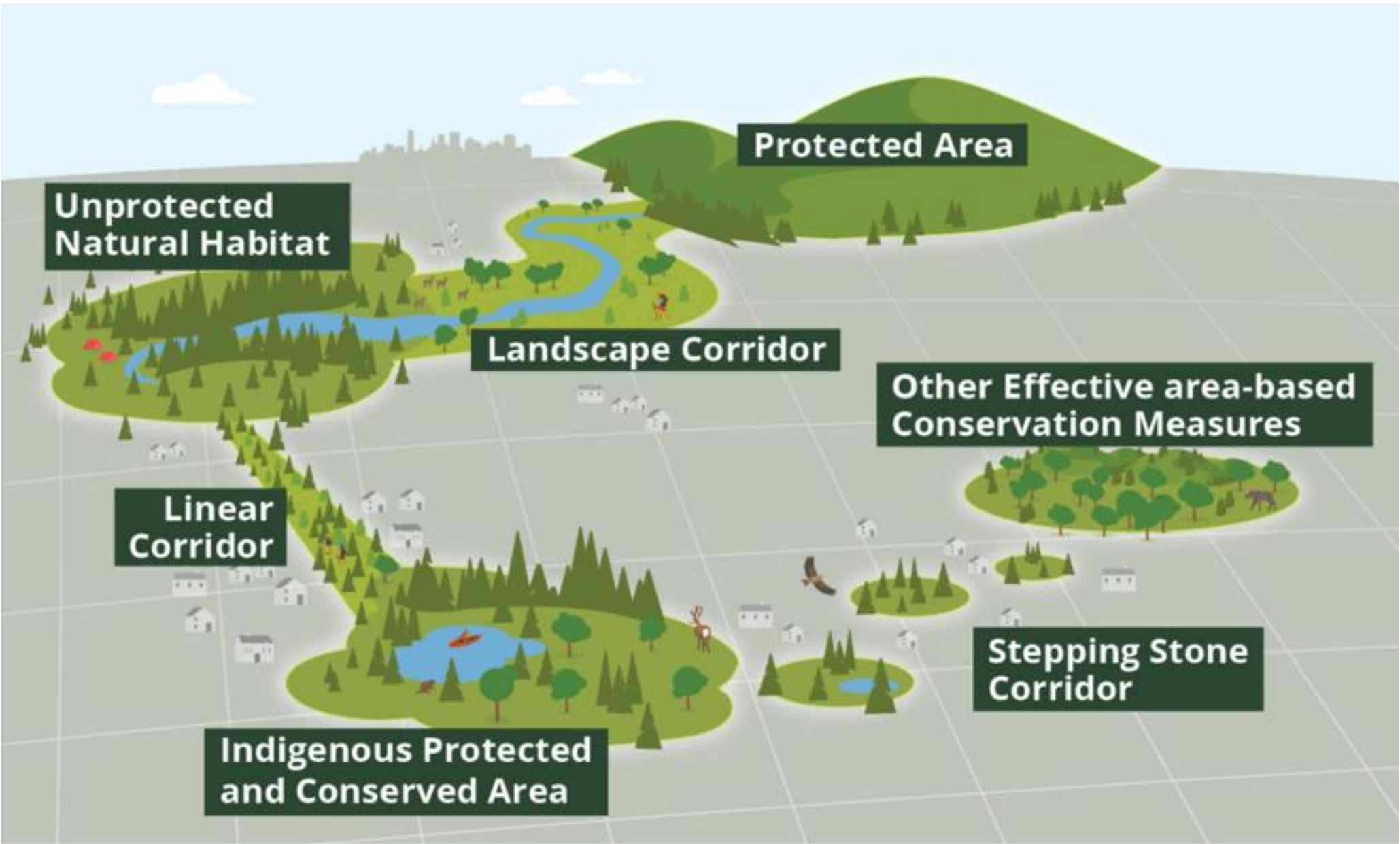
Trails and open space corridors

Riparian areas

Wildlife crossing structures



Credit: fStop Foundation





# Connectivity and the Transect

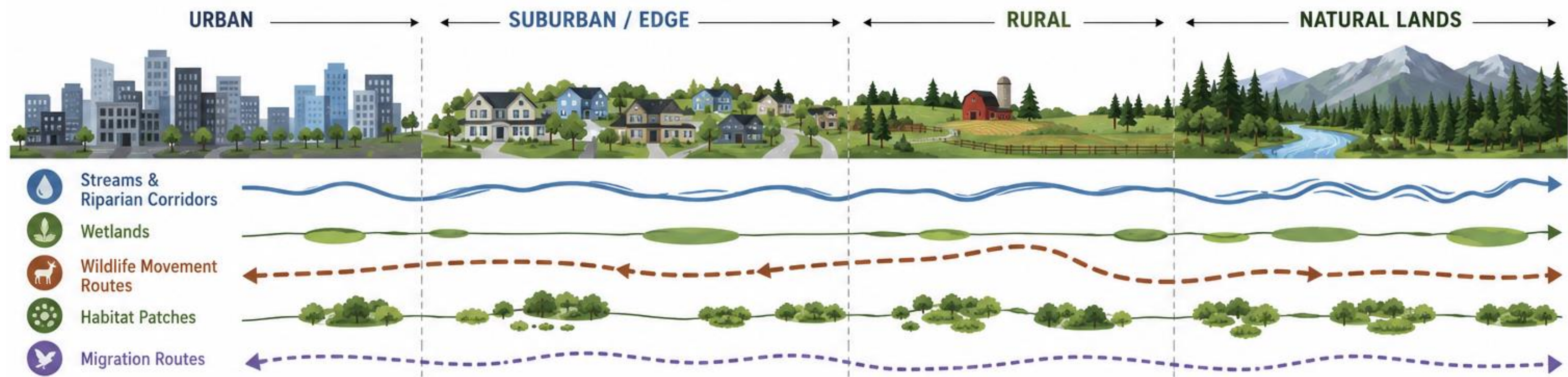


Image: AI robots

*But the window to maintain connectivity is closing*



# Role of Land Use Planning in Connectivity

Local governments hold land use authority over nearly 2/3 of the United States

*~1.3-1.4 billion acres*

Perhaps biggest influence on our landscapes, wildlife habitat, and connectivity

*Indigenous peoples, farmers, ranchers, and other landowners are integral to conservation success*

It's important that we all directly consider wildlife and habitat in land use planning: local governments, developers, designers, and partners all have a role





# Integrating Connectivity into Land Use Planning

## Know where key wildlife habitat exists

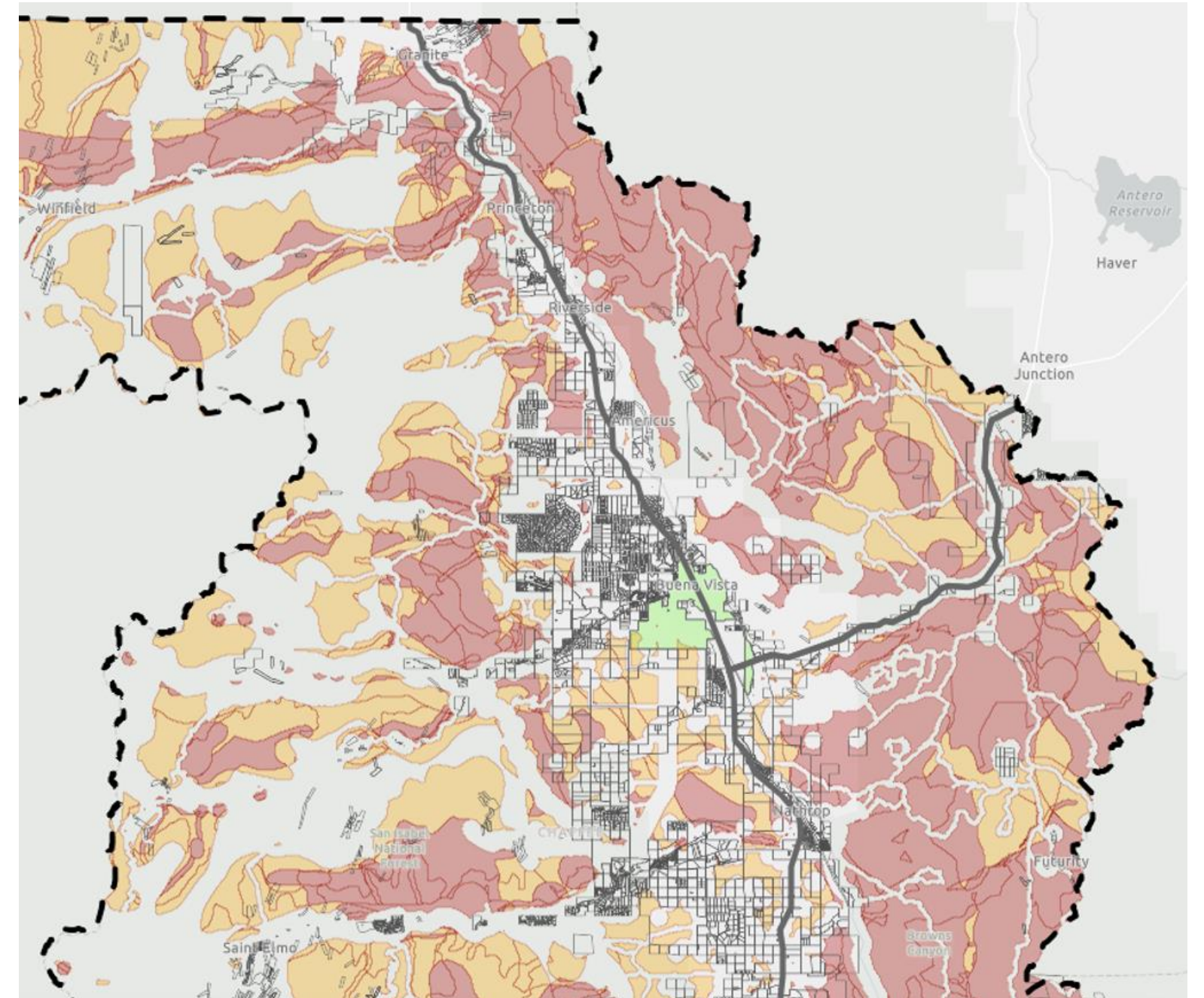
- Mapping

## Protect wildlife habitat and movement

- Limit development and activities in key habitat areas
- Protected open spaces
- Buffers from natural resources

## Build where appropriate

- Encourage building in town centers
- Cluster development



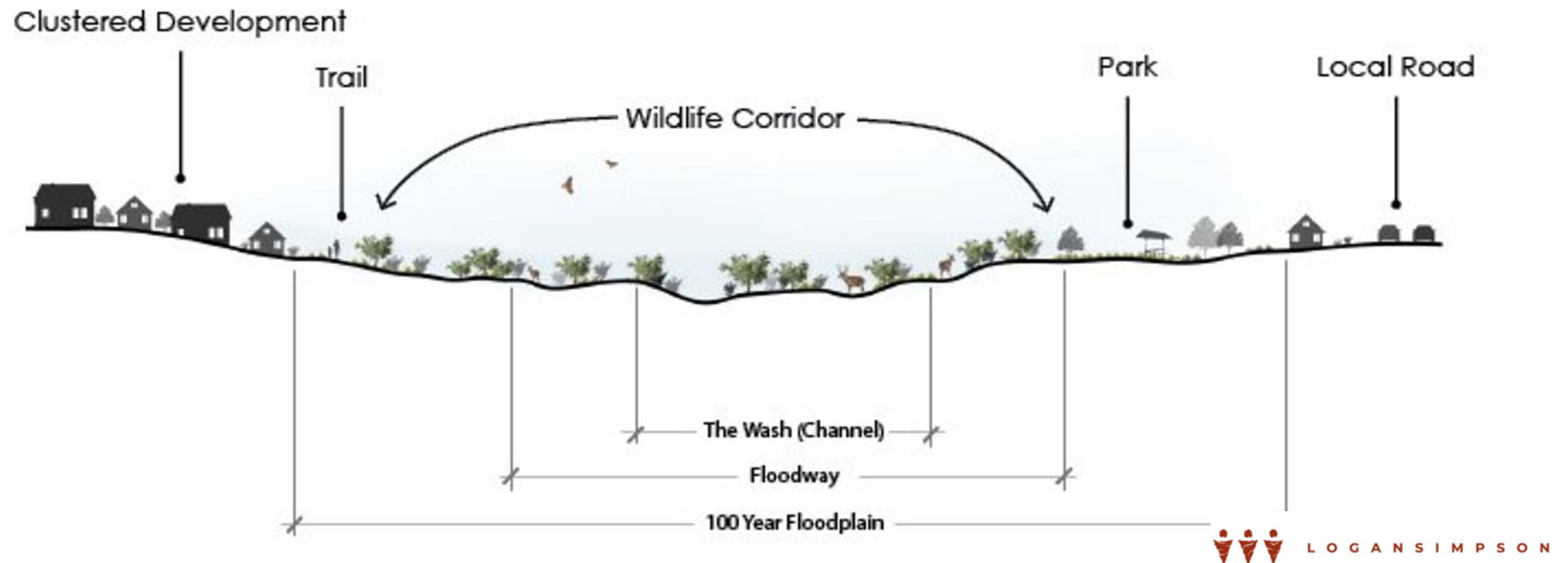
Chaffee County, CO Habitat Map



# Communities Have Competing Priorities

Infrastructure, public services, transportation, housing, development, and so on...

## But Planning for Connectivity Can Meet Multiple Objectives





# The Benefits of Planning for Connectivity

**Cost savings** — efficient growth near existing infrastructure

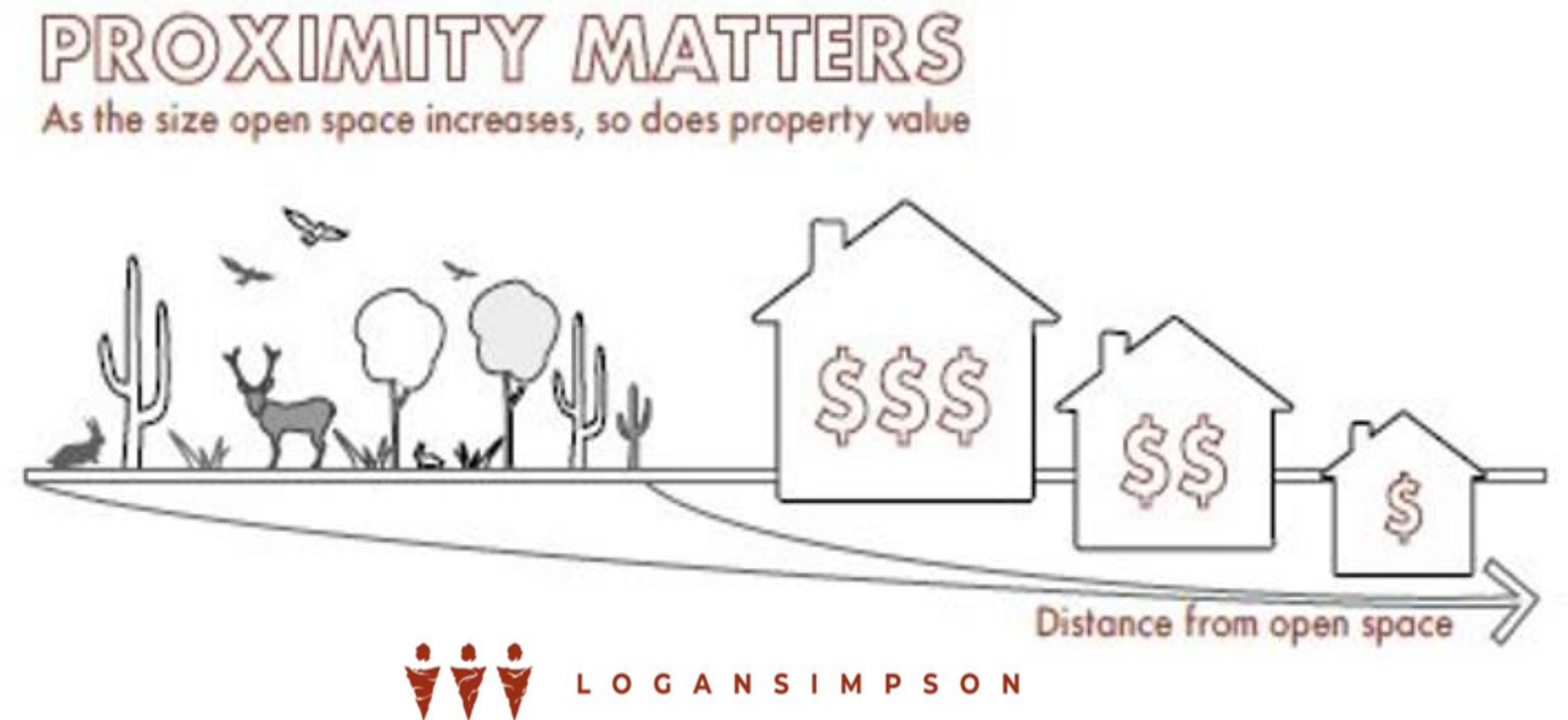
**Economic value** — higher property values and sustained working lands

**Smarter growth** — predictable, flexible, lower-risk development

**Hazard resilience** — stormwater and flood control, water and air quality

**Quality of life** — connected open space, recreation, and health benefits

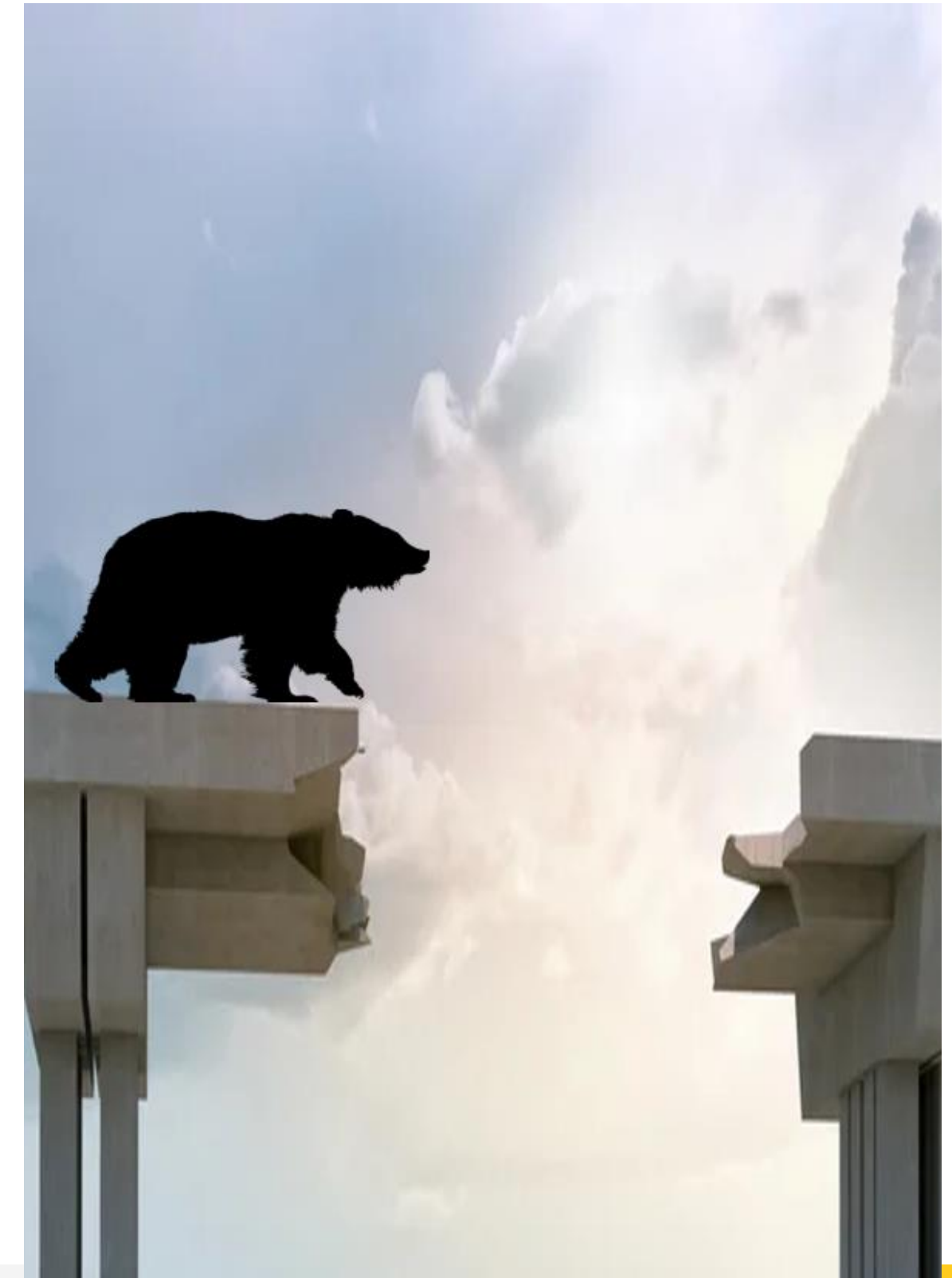
**Safety** — fewer wildlife-vehicle collisions and human-wildlife conflicts





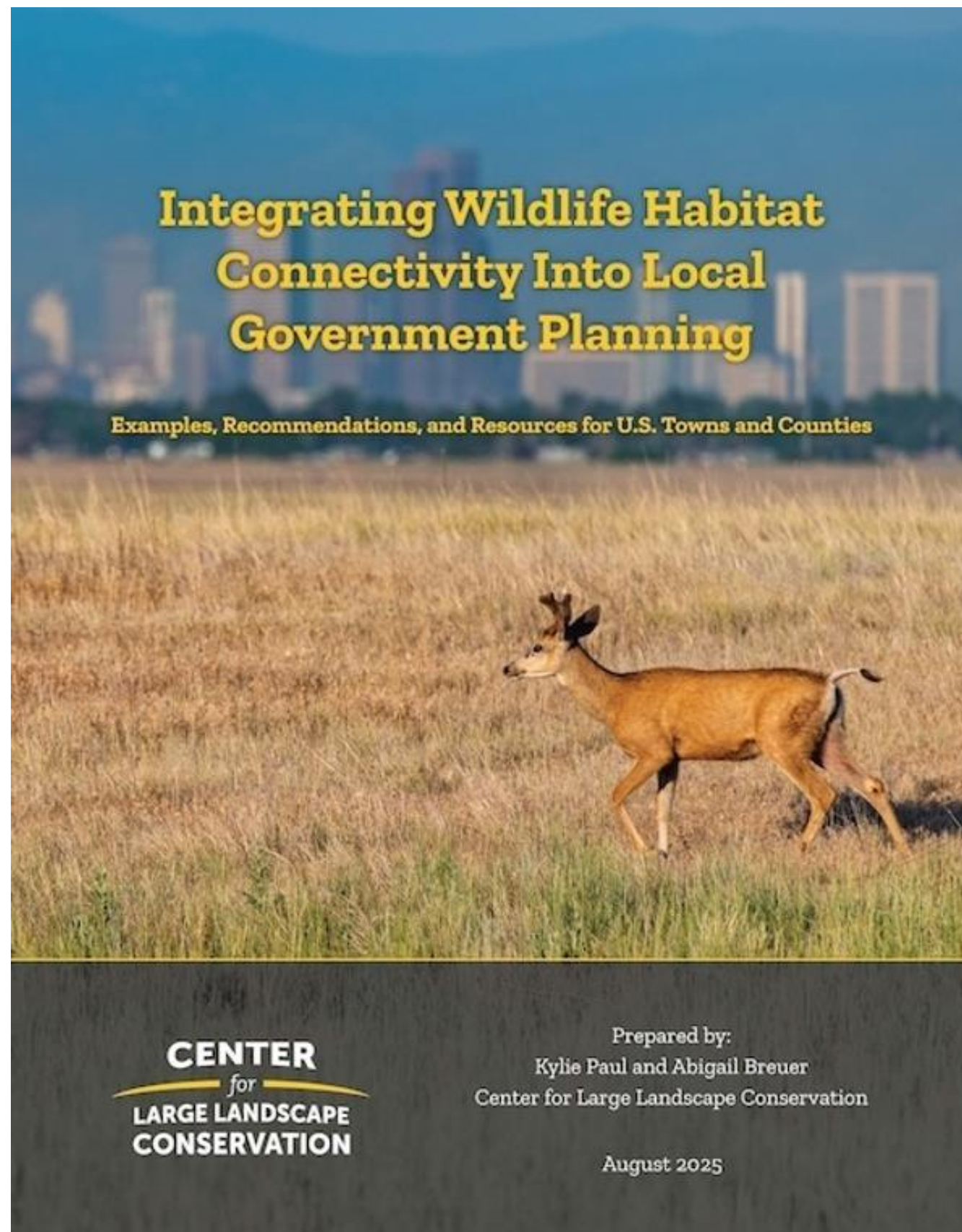
# So Why Don't We All Do It?

- Limited authority or mandates (in some states)
- Some communities lack regulatory tool options (i.e., zoning)
- May have broad wildlife language in comp. plans but not actual implementation or direct, specific tools
- Limited staffing and/or financial resources
- Lack of ecological data or staff expertise





# The Report



***Integrating Wildlife Habitat Connectivity Into Local Government Planning: Examples, Recommendations, and Resources for U.S. Towns and Cities***

**[Largelandscapes.org/local-planning](https://largelandscapes.org/local-planning)**





# Contents of Report

Introduction/Background

Recommendations

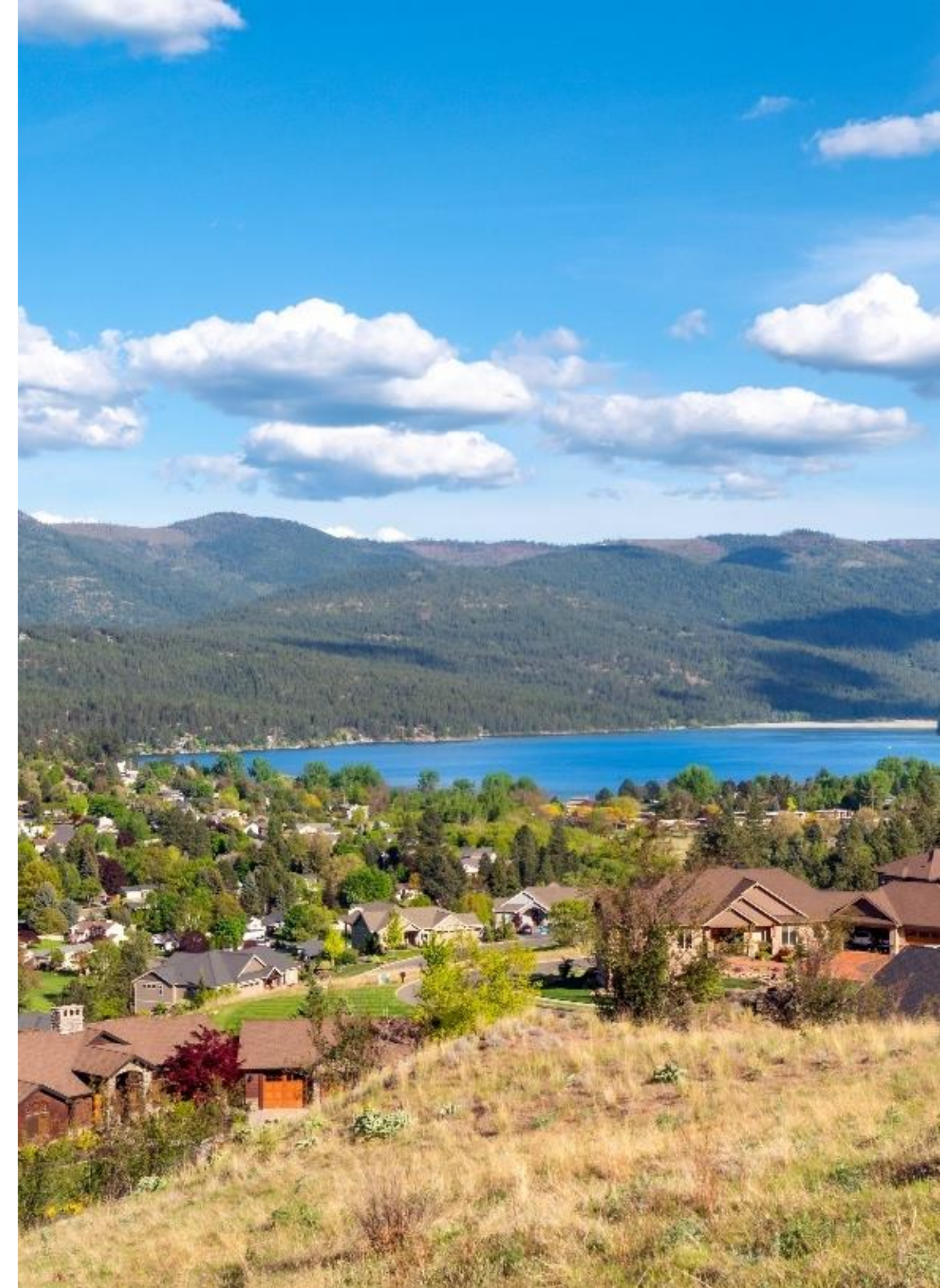
Examples

Case Studies

Resources

*Many examples across the country*

*Many ways to integrate connectivity that reflect community values and current capacity*





# Comprehensive Plans and Functional Plans

## Comprehensive Plan Examples

*Protect critical wildlife habitat, connectivity and migration corridors cross-jurisdictionally.*

Chaffee County, Colorado

*Lake County shall regulate uses and activities consistent with the Conservation Element and other policies of this plan in order to protect wildlife, habitat and wildlife corridors.*

Lake County, Florida

*Establish natural resource corridors that link and protect natural open spaces and environmentally sensitive areas, to retain the rural character of Scott County and provide for wildlife corridors.*

Scott County, Minnesota

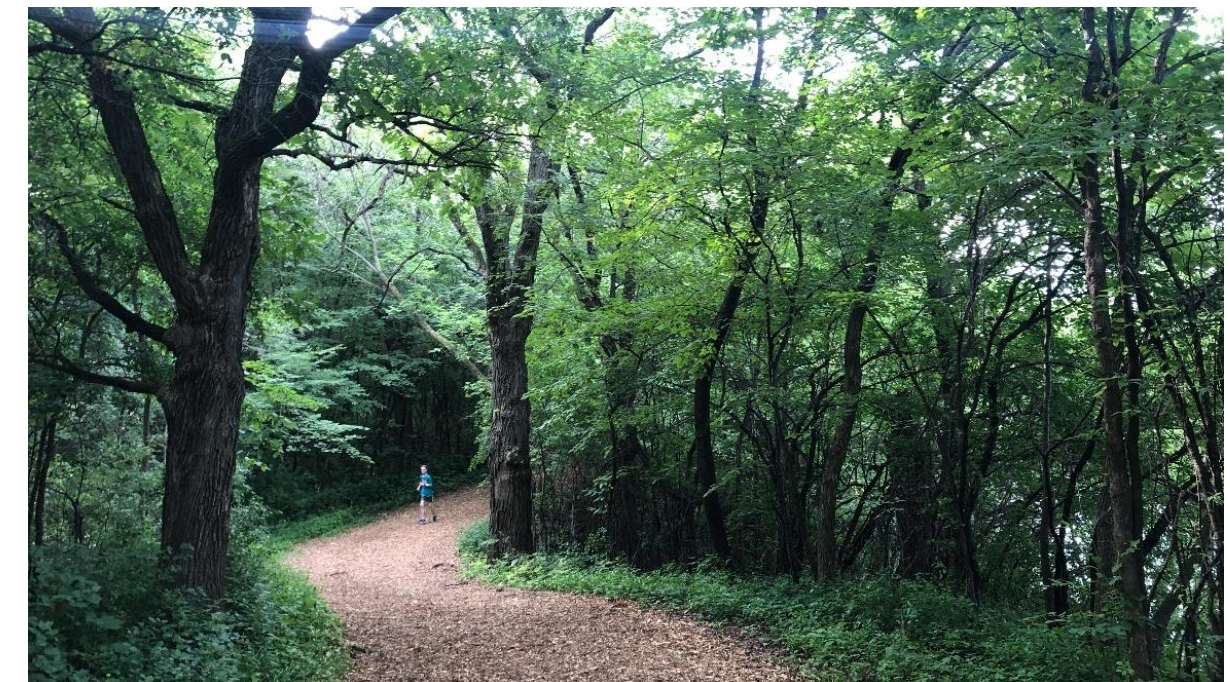
## Functional Plan Examples

Gallatin County, MT: Sensitive Lands Protection Plan

Albermarle County, VA: Biodiversity Action Plan

Teton County, WY: Wildlife Crossings Master Plan

Frederick County, MD: Green Infrastructure Plan





# Regulations and Incentives

*Includes:* Zoning, codes, ordinances, standards

*Approaches:* Cluster development, density bonuses, purchase of development rights, stream buffers/set-backs, etc.

## Examples

Routt County, CO: Development within a Sensitive Wildlife Area

Lake County, FL: Rural Conservation Subdivision Design Standards

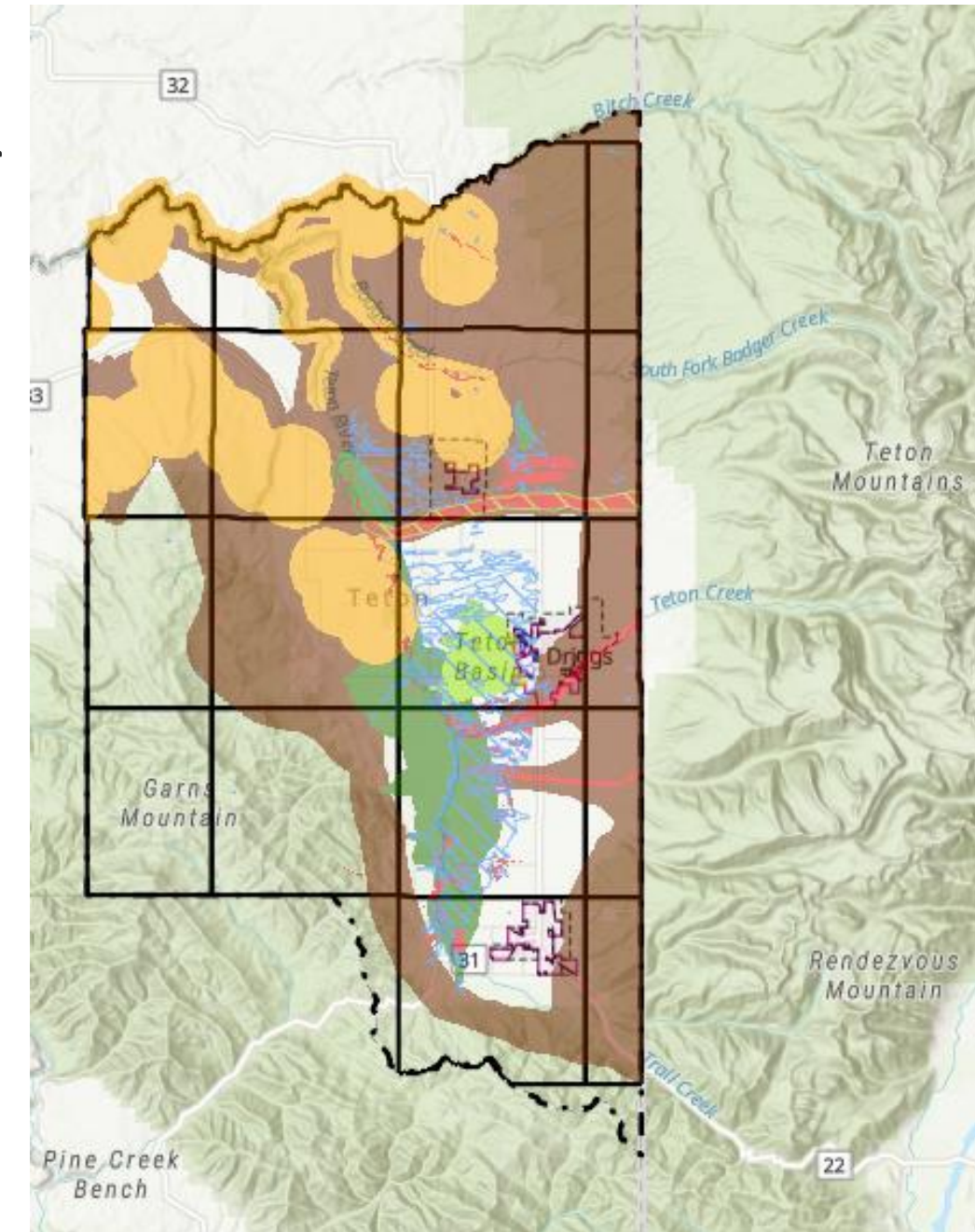
Pinelands, NJ: Regional Pinelands Development Credit Program

## Overlay Examples

City of Eagle Mountain, UT: Wildlife Corridor Overlay

Brunswick, ME: Wildlife Protection Overlay District

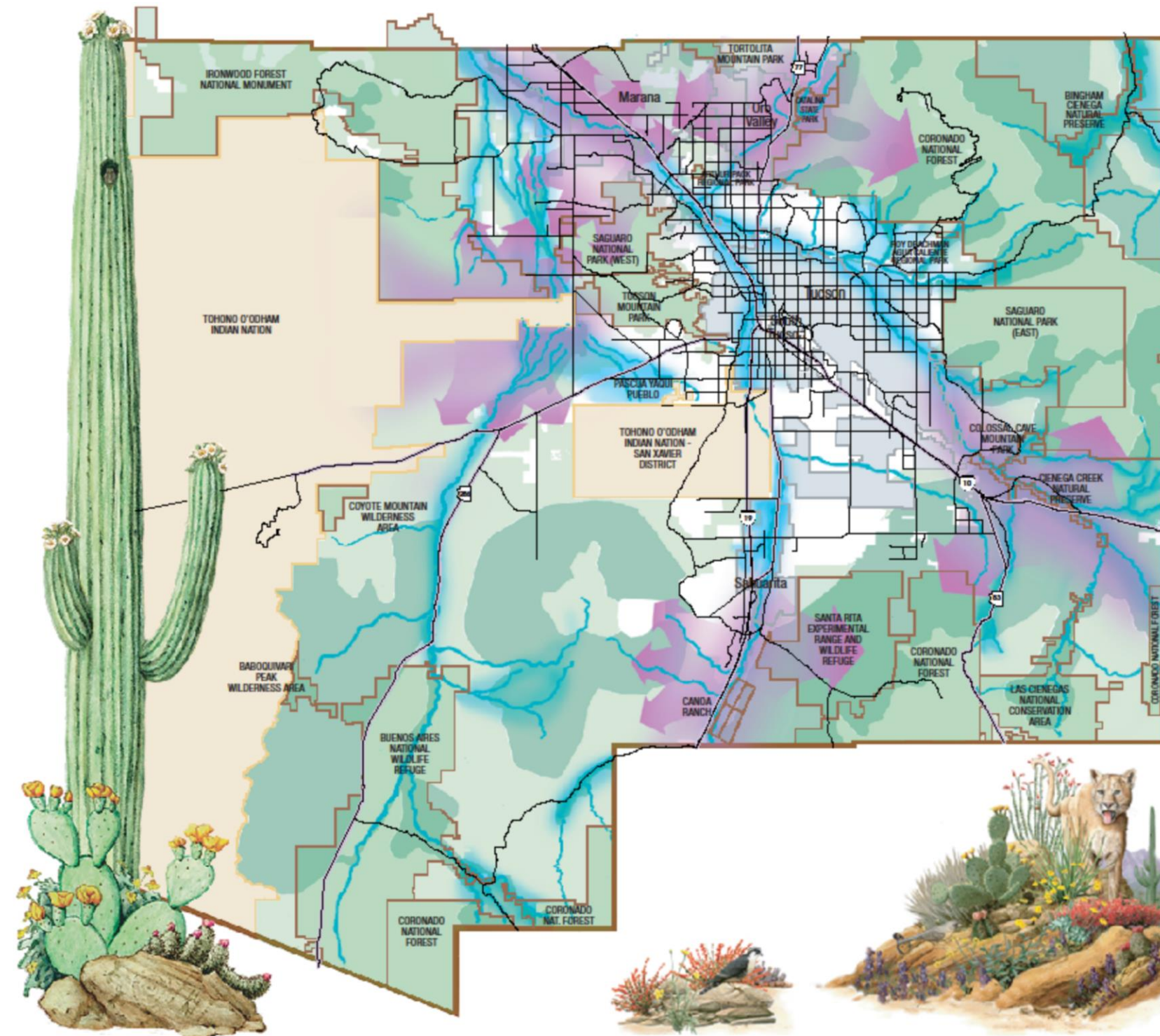
Ventura County, CA: Habitat Connectivity and Wildlife Corridors Overlay Zone



Teton County, ID  
Natural Resource Overlay



# Enabling Conditions



Pima County, AZ biological corridors and critical habitat map

## Science and Mapping

Buckeye, AZ: Buckeye Wildlife Corridors  
Best Practices Guide

Denton, TX: Wildlife Corridors Map

## Funding

Pasco County, FL: Pennies for Pasco

## Land Conservation

Douglas County, CO

San Diego County, CA

## Regional Planning

Durham-Chapel Hill-Carrboro  
Metropolitan Planning Organization, NC:  
Wildlife Crossings Plan



# Enabling Conditions

## Staff

King County, WA Water and Land Resources Division

## Partnerships

Litchfield County, CT: Northwest Connecticut Affordable Housing and Conservation Collaboration

Maricopa County, AZ: White Tank Mountains Regional Connectivity Initiative

## State Legislation

CA: Room to Roam Act

FL: Florida Wildlife Corridor Act

## State Technical Programs

NC: Green Growth Toolbox

WA: State connectivity mapping





# Planning and Designing for Connectivity Across the Transect

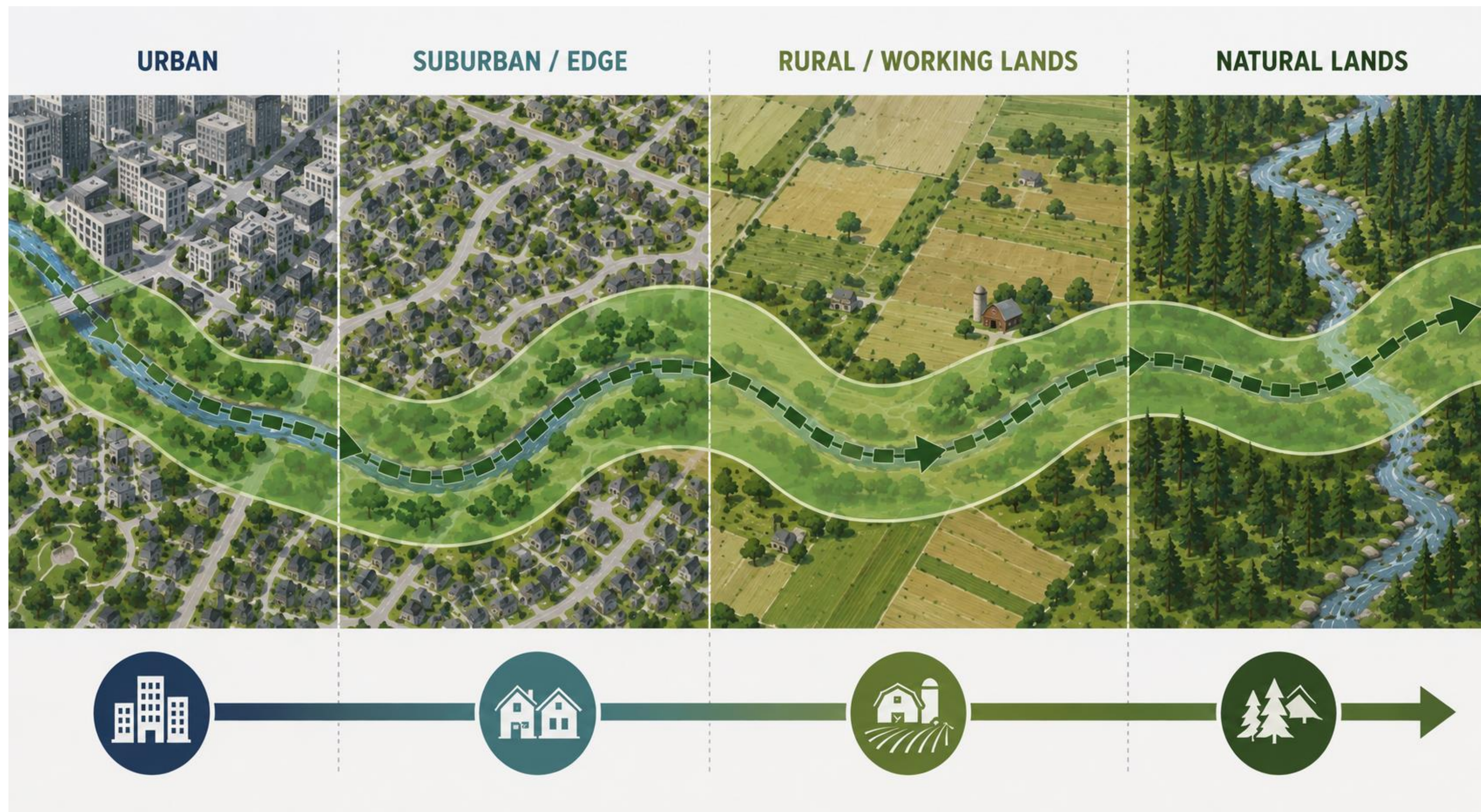
|                             |  URBAN |  SUBURBAN / EDGE |  RURAL |  NATURAL / WORKING LANDS |
|-----------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Connectivity considerations | Riparian corridors, parks, habitat stepping stones, crossings                           | Maintaining corridors before they become fragmented                                                 | Maintaining large connected landscapes and movement routes                                | Protecting key linkages between larger habitat blocks                                                       |
| Potential planning tools    | Open space, park planning, development standards, street design                         | Cluster development, overlays, setbacks, subdivision standards                                      | Density, conservation subdivision, TDR/PDR, agricultural/open space protections           | Comprehensive plan policies, conservation programs, regional coordination                                   |

*Connectivity is a function that can be supported across the transect*

*Connectivity is a landscape-scale outcome of many local decisions.*

*Planning can create greater certainty for landowners and the public - and they care about nature and wildlife.*





*When we plan for connectivity across the transect, we create landscapes where people and wildlife can thrive.*

Image: AI robots



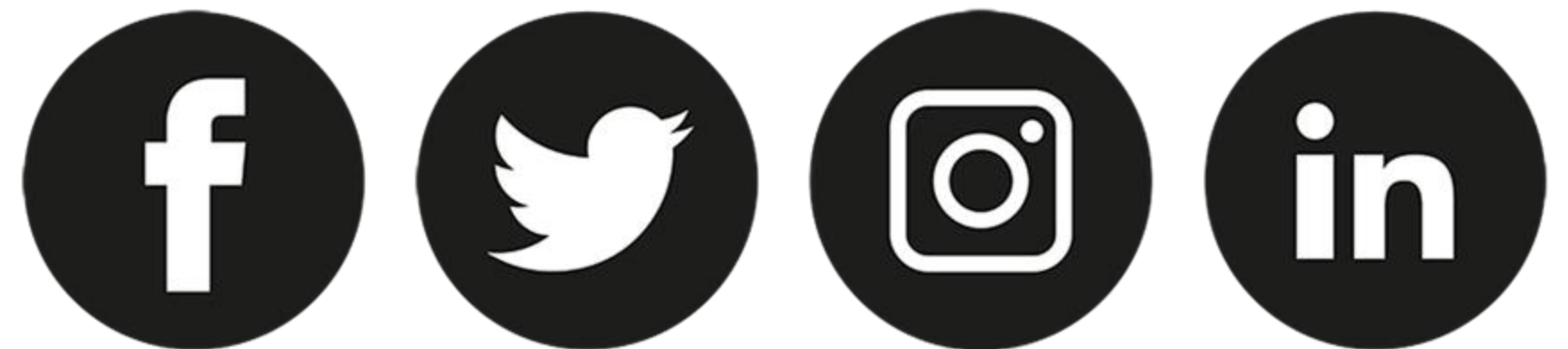
**Learn More**



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[Largelandscapes.org/local-planning](https://largelandscapes.org/local-planning)

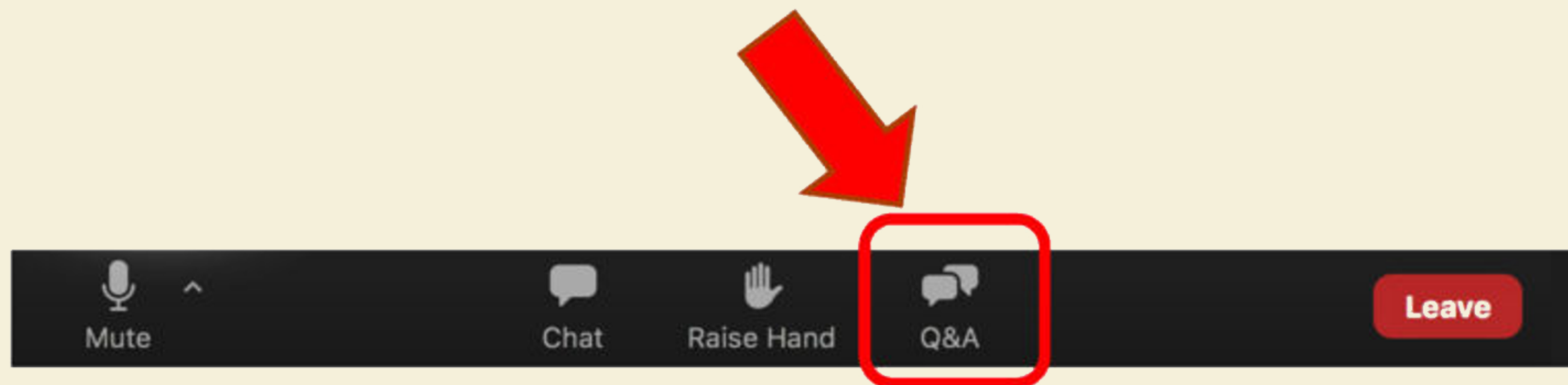




# Questions & Answers

Please submit questions for speakers using the Q&A button on your Zoom control panel.

Keep questions succinct and, if possible, indicate who your question should be directed to.





# Follow-up Survey, Certificate of Attendance

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*Email [friends@1000fof.org](mailto:friends@1000fof.org) with any questions about credits or your certificate.*





# Upcoming Webinars



**Conservation That Connects: How Florida Communities Fund Greenways & Trails**  
(12:00 – 1:30 P.M. ET)



**Connectivity Across Scales:  
Tools for the Urban-to-Rural Transect**  
(12:00 – 2:00 P.M. ET)



Register at  
[1000fof.org/webinars](https://1000fof.org/webinars)