



## Bear Wise: Waste Management Update

September 2, 2015

**Florida Fish and Wildlife Conservation Commission**  
Division of Habitat and Species Conservation

Version 1

This presentation summarizes recent efforts to partner with waste management companies, local governments, and residents to implement comprehensive waste management actions intended to reduce human- bear conflicts.

Staff presented preliminary ideas and planning at the June 2015 Commission meeting. At that time, the Commission approved the waste management resolution and policy paper. The Commission also directed staff to return with an update at the September Commission meeting.

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## Florida's Conflict Wildlife- Bears



This slide builds off of the wildlife conflict policy area that Commissioners discussed previously. Bears fit this “Leaning J” concept well.

- The first part of the curve is **Little or no management**. In the early centuries as Florida was settled bears numbered around 11,000 statewide and were over exploited and hunted indiscriminately, which led to the bear becoming rare and almost extirpated from Florida.
- Then came the **recovery management** phase. In 1974 the state listed the bear as threatened with populations estimated as low as 300 – 500 bears. Hunting was closed in all but 3 counties until 1994 when the season was closed state-wide. With protection and improved habitats, bear populations began to rebound and bears become more numerous. In 2002, the statewide population was estimated at 3,000 bears. The bear was removed from the state threatened list in 2012, when the current bear management plan was approved.
- As bear numbers have grown over the past decade and human population has increased, we entered the next phase of management, which is **conflict management**. In recent years conflict has increased dramatically. Bear calls have increased 400% over the last decade. We are striving for sustainable coexistence, and look forward to working with you to see what next steps we might take.
- Where we are right now on this curve is subject to individual interpretation, but recent events suggest somewhere squarely in the conflict management zone. The actions discussed by staff in this presentation seek to help move the system beyond conflict management and into sustainable coexistence that promotes the conservation of bears while ensuring human safety.

# Comprehensive Approach to Bear Management

- Habitat Conservation
  - ✓ Wildlife Management Areas and other public conservation lands
  - ✓ Connectivity via underpasses and greenways
  - ✓ Agency commenting on land use
- Population Management
  - ✓ Bear demographic studies
  - ✓ Monitor mortality
  - ✓ Statewide population assessments and range update
  - ✓ Hunting as possible option
- Human- Bear Conflict
  - ✓ Remove bears that pose public safety threat
  - ✓ Attractant management (garbage)
  - ✓ Feeding rule and penalties
  - ✓ Hazing options
  - ✓ Depredation permit option
- Education and Outreach
  - ✓ partner with local communities
  - ✓ Website and materials
  - ✓ Bear curriculum



The Florida Fish and Wildlife Conservation Commission (FWC) is responsible for managing bears in Florida. Agency efforts are directed by policies and actions set forth in FWC's Florida Black Bear Management Plan, which was approved in 2012. The overall approach is multi-pronged and focuses on maintaining bear populations at healthy levels while ensuring public safety, use, and enjoyment of the bear resource. Human safety is the agency's paramount priority and the agency's approach to human-bear conflicts can be broken down into core short- and long-term components, which deal with addressing immediate safety issues and addressing food attractants and population management for the long-term. Many of these issues, particularly comprehensive waste management, go far beyond the ability of FWC to handle alone. We all must share in the responsibility to manage human-bear conflicts effectively.

## Background

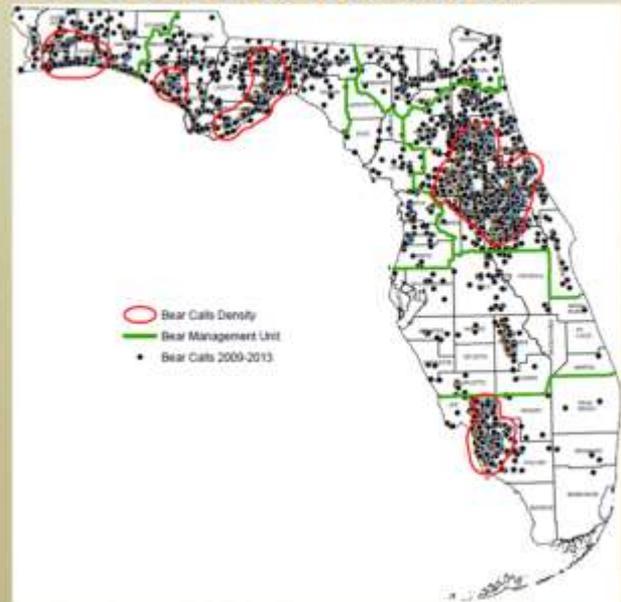
- Human- bear conflicts have increased 400% over the past 10 years
- 4 serious attacks on people over past two years
- FWC has bolstered human- bear conflict measures
  - More aggressive stance on bears that pose public safety threat
  - Strengthened feeding rule and penalties
  - Hazing and depredation options
  - Hunting as a population management tool
  - “Bear Wise” measures
- Comprehensive waste management is key issue
  - FWC waste management resolution
  - FWC waste management policy paper



Comprehensive waste management is a key element of the Bear Wise approach. The FWC is taking many actions to address human- bear conflicts and this presentation provides an update on efforts to implement the Commission-approved resolution and policy paper on comprehensive waste management.

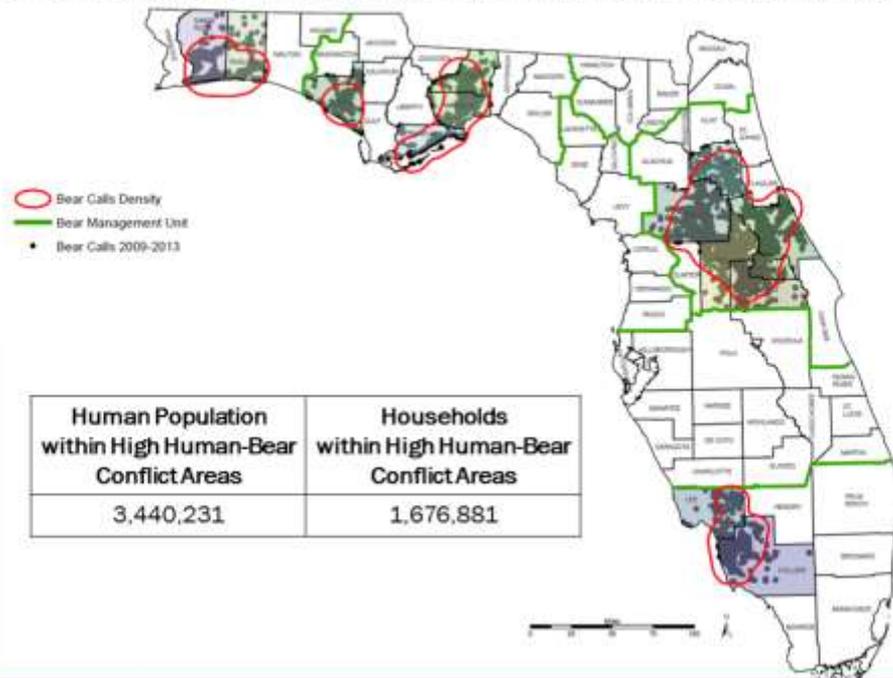
## Human- Bear Conflict Call Distribution

- Calls occur throughout state
- Concentrated in five areas
- Human attractants are primary cause of conflicts
- Comprehensive waste management is needed



The FWC receives calls regarding human- bear conflicts from across the state. These calls tend to be concentrated in five areas which are shown in red on this slide's map. The primary cause of these conflicts is human attractants such as garbage. A comprehensive approach to waste management can help reduce conflicts.

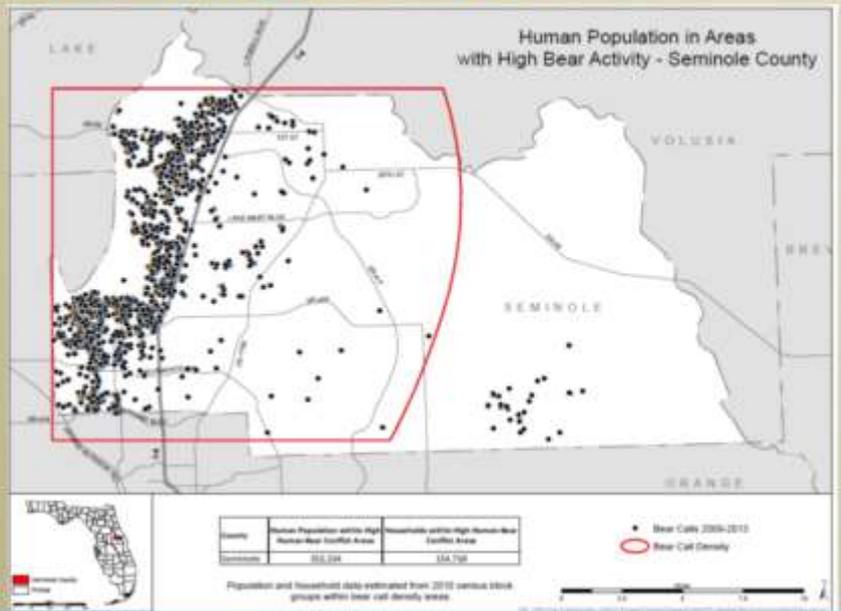
## Human Populations in 14 Counties with High Bear Activity



The FWC identified that 90% or more of human-bear conflicts are occurring in 5 different parts of the state in 14 counties. Within those counties, there are specific areas where conflicts are highest. The highest level of conflicts occur in central Florida in the six counties that encompass and surround the Ocala National Forest. Other high conflict areas include counties in the panhandle some of which border Apalachicola National Forest and Eglin Air Force Base, as well as counties in southern Florida near Big Cypress National Preserve. By identifying these conflict hotspots and the number of households in each specific area within each county, we can work with local government and waste service providers to develop effective solutions to these issues.

## Seminole County Example

- Calls concentrated west of I-4
- 352,000 people
- 155,000 households
- Challenging to deploy bear-resistant cans at scale



Seminole county is a good example of how challenging it is to deploy bear-resistant trash cans across an entire area with elevated human- bear conflicts.

## Many Options to Secure Trash



Bear-Resistant Trashcan



Keep in garage/shed



Electric fence



Trashcan shed



Modified trashcan



There are many options to secure residential trash, and often no single option fits all residents even in a single neighborhood. Depending on people's situations and preferences, all of these methods can be effective in keeping bears out of trash, ranging from the no-cost option of keeping trashcans in a sturdy or garage until the morning of pick up all the way to trashcans that are specifically manufactured to be bear-resistant, which can cost around \$200.

## Recent Incentives

- Have worked with all 14 counties
- Conserve Wildlife license tag grant funds from Fish and Wildlife Foundation of Florida
  - \$160,000 to 12 of 14 counties
  - > 2,800 cans, kits, and sheds



The FWC has been actively involved with all of the 14 counties that received the highest numbers of human-bear conflicts. The FWC has provided financial incentives through grants from the Wildlife Foundation of Florida using proceeds from the Conserve Wildlife license plate sales to 12 of those 14 counties. Funds were used to offset resident costs to purchase and lease bear resistant equipment, including bear-resistant trashcans, kits to modify regular cans to make them more bear-resistant, and sheds designed to keep trashcans secure from bears.

## Shared Responsibility

### FWC Role

- Educate the public
- Provide technical assistance
- Remove conflict bears
- Manage bear populations
- Enforce feeding prohibitions
- Work with communities on being Bear Wise



### Local Role

- Ensure methods to secure garbage are available
- Enact ordinances, covenants, or bylaws
- Monitor and enforce for compliance
- Work with FWC on being Bear Wise



The FWC will continue to perform in its role to educate the public, provide technical assistance, remove conflict bears, manage bear populations, and enforce feeding prohibitions. However, the problem of unsecured waste needs to be addressed comprehensively at the appropriate scale. The best approach brings together locally-elected officials and local government staff, along with waste service companies, to work together with FWC to resolve the problem in a cost-effective manner at a large scale.

In this regard, the FWC is asking local governments in areas with frequent human-bear conflicts to do the following. Ensure their residents and businesses have access to multiple methods of securing garbage and other bear attractants. If these methods require additional costs to residents and businesses, the local government should negotiate with their waste management provider to offer these at the most reasonable price possible. Enact ordinances, covenants, or bylaws at the appropriate level that would require residents and businesses keep their garbage and other bear attractants secure. Have an enforcement mechanism in place to address non-compliance with requirements to keep garbage and other bear attractants secure.

## Waste Service Companies

14 counties contract with 11 companies

- 6 contract with 3 companies each
- 1 contracts with 2 companies
- 4 contract with 1 company each
- 2 have no contracts



The FWC is working not only with the 14 county governments, but a minimum the 11 different waste service companies that have contracts to service them, which includes 7 private companies and 4 public utilities. Of the 14 counties, 6 have service contracts with 3 waste companies each, 1 has a contract with 2 waste companies, 4 have contracts with 1 waste company each, and 2 counties (Bay and Franklin) do not have any contracts, and so any number of companies can and do operate in those areas.

## Cooperative Efforts

- Met with:
  - FL Chapter National Waste and Recycling Association
  - FL manufacturer on making bear-resistant cans
  - Statewide Bear Technical Assistance Group
- Currently working with 6 counties to increase availability of bear-resistant equipment



The FWC recognizes that this effort will involve a high level of cooperation with local governments, waste companies, and stakeholders. Staff therefore have been meeting with representatives from both the waste companies as well as a local manufacturer of trashcans to discuss options to modify their facilities to produce bear-resistant trashcans right here in Florida. Staff also met with the Bear Technical Assistance Group, which is composed of people representing over 20 different partner agencies, non-profit organizations, and civic groups. The FWC is already directly engaged in the planning and implementation stages in 6 counties where incentive funds were used to increase availability of bear-resistant equipment for residents.

## Developing a Waste Management Action Plan

- Clearly identify human-bear conflict hotspots
- Prioritize areas for implementation
- Partner with citizens, local governments, waste management companies, and stakeholders
- Ensure reasonable options are available; utilize incentives
- Identify any obstacles
- Pass local covenants, bylaws, or ordinances
- Outreach to residents to ensure participation



As directed by Commissioners in June, staff are currently working on a Waste Management Action Plan to execute the objectives of the resolution signed at the June meeting. Many cooperators mentioned previously are working with FWC to draft the plan.

## The Good News is - It Works!

- At least 16 communities in the US have ordinances requiring bear wise approaches (two in Florida)
- Multiple municipalities in Colorado, California, and Alaska
- Canadian Cities have ordinances as well



		Bear Interactions Before	Bear Interactions After	Reduction
Ft. Walton Beach	Retrofitted Trashcans	71%	32%	55%
Glenwood	Bear-Resistant Trashcans	97%	5%	95%

There are many examples across North America, including in Florida, where municipalities have enacted ordinances to keep waste secure from bears.

## Next Steps

- Implementing a Comprehensive Approach to Waste Management
- Finalize Waste Management Action Plan
- Work with Commissioners & Waste Service Companies Cooperatively on Solutions



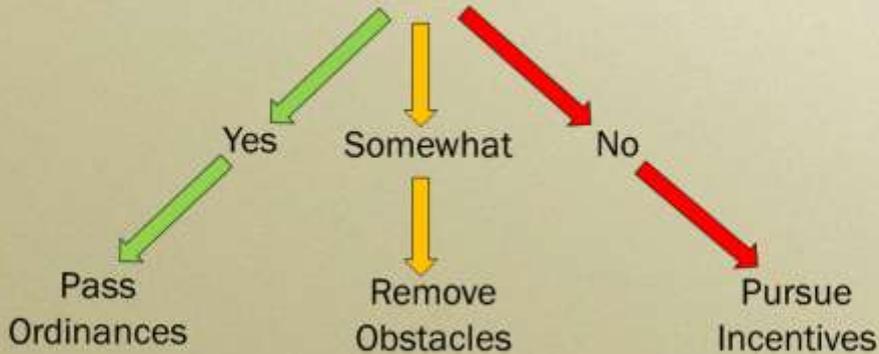
Staff requests the continued guidance and assistance from Commissioners as we move forward with implementing a comprehensive approach to waste management.

The following slides are considered backup material  
and are not anticipated to be part of the actual  
presentation



## What Actions Where?

Are there reasonable options available to secure trash?



While we ultimately would like to see ordinances in place wherever there are high levels of human-bear conflicts, the conditions for each area are very different, and some areas have the elements in place that are conducive for an ordinance, others are close, while others are not ready for an ordinance at all. One of the most important elements that must be in place are multiple options to secure trash available that are reasonably priced for residents to use. In areas where this is available, ordinances can be put in place. If an area has only some options, or perhaps multiple options are available but not at a reasonable, FWC can work with the local governments and waste companies to alleviate those issues. In areas without multiple reasonable options, FWC will seek out appropriate incentives to get those in place.

## Willingness of Public to Take Action

Bear Management Unit	Keep trash secure until morning of pick-up	Build shed to secure trash	Add hardware to make can more bear-resistant	Lease bear-resistant trashcan for extra \$6-8 per month	Pay fee to provide bear-resistant cans to all residents	Support law requiring attractants to be secured
Central	87%	65%	70%	51%	46%	58%
West Panhandle	93%	63%	81%	67%	N/A	83%
East Panhandle	90%	69%	80%	59%	52%	60%
South	100%	85%	96%	89%	91%	93%



The FWC held 19 public meetings across the state to talk with people about managing bears at the local level, in Bear Management Units. During those meetings, the FWC asked the participants several questions, including their willingness to take or support certain actions to keep trash secure from bears and other wildlife. While these surveys were not random nor did they sample a high proportion of the residents in these BMUs, they are instructive as to people's opinions who chose to come to the meetings. The BMU meetings had varying levels of public participation: Central had 464, West Panhandle had 70, East Panhandle had 84, and South had 135 participants.