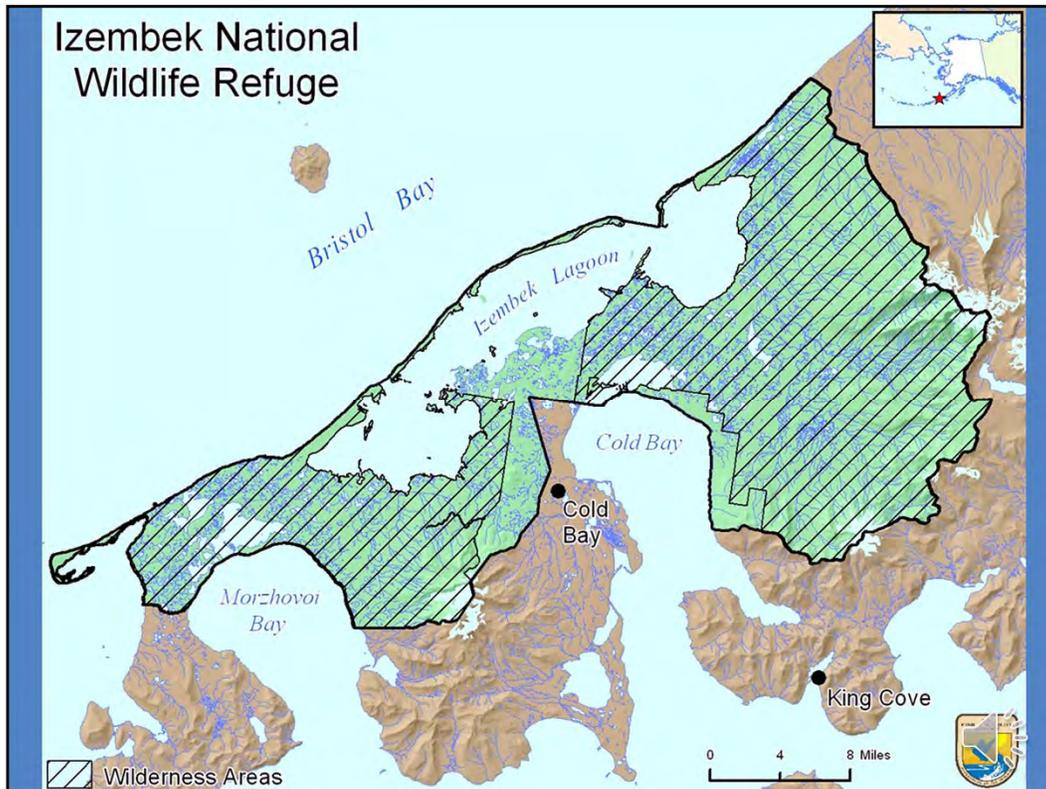
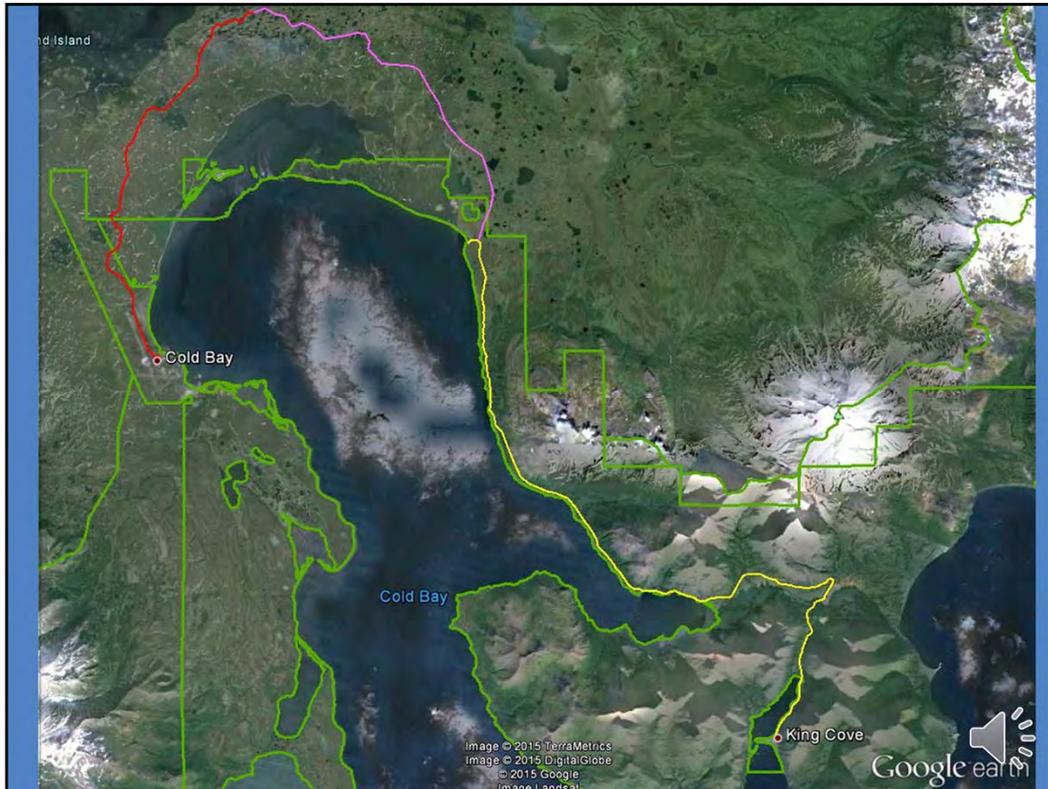




This is an analysis of roads within National Wildlife Refuges nationwide as relate to the King Cove to Cold Bay access road through Alaska's Izembek NWR. This image shows the road to Kantishna, in Denali National Park. It is a single lane, low-speed, low-volume gravel road very similar to the road needed through Izembek. Much like what the road in Izembek would do, the road to Kantishna also cuts through a federally designated wilderness.



At issue is the State's ability to build a road through the Izembek NWR. The road is needed in order to link the community of King Cove to an all-weather airport at Cold Bay. In this image, the refuge is shown in green. The wilderness portions of the refuge are shown with black hash marks.



This is a satellite image from Google Earth Image. What is frequently left out of the present debate is the fact that roads linking the two communities already exist through much of the refuge.

A road leading from Cold Bay and extending into the Izembek National Wildlife Refuge and partially into the wilderness area is shown here in red. It is approximately 12.5 miles long.

A road also extends from King Cove to the Northern Hovercraft site, shown in yellow in this image. It is roughly 22 miles long. Much of it traverses land which was formerly part of the Izembek Wilderness Area.

The only segment of new road that is needed is shown in fuchsia and is roughly 10 miles in length.



The question is how harmful would it be for the refuge and its abundant wildlife if a few short miles of gravel, single lane, low-volume, low-speed road were allowed to be constructed through refuge? Would this. . .



And this . . .



And this . . .



And this . . .



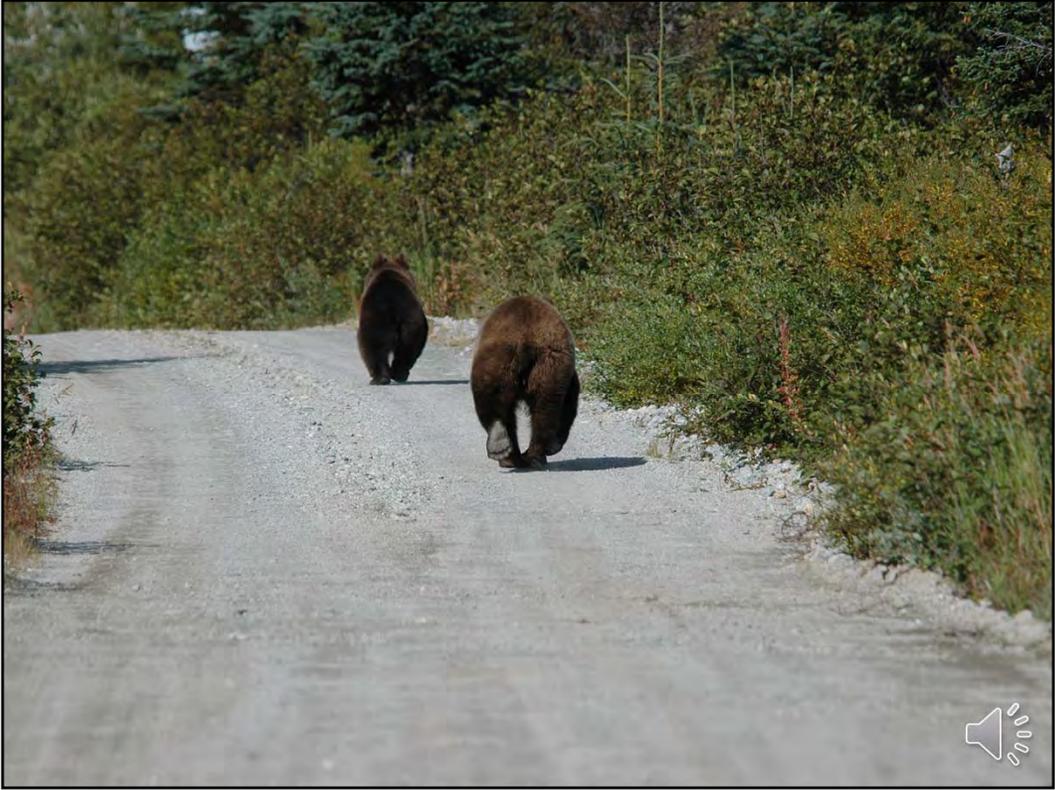
change to this, if just a few short miles of road were built?



A road like this one.



Or this one. . .



Or this one?



The FWS would lead you to believe that under no circumstances can wildlife and roads reasonably co-exist.



However, as will be shown. . .



this simply isn't true.



Instead, across NWRs nationwide. . .



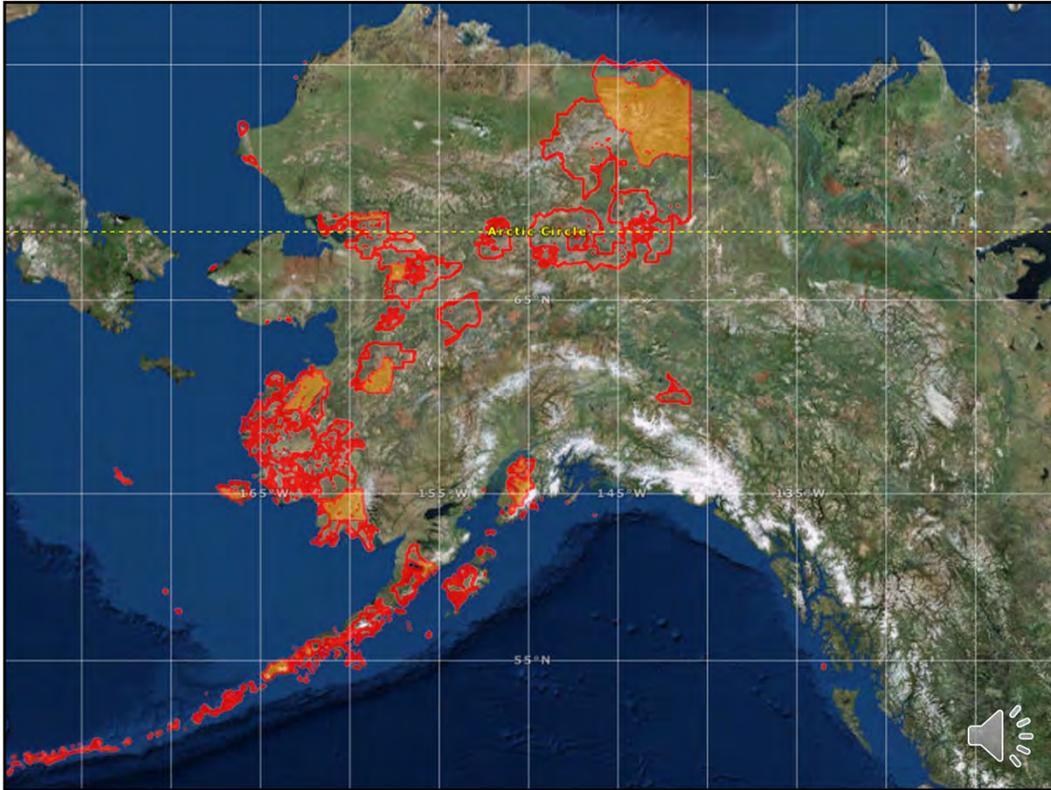
wildlife manages to flourish among an abundance of roads, even on roads within wilderness areas.



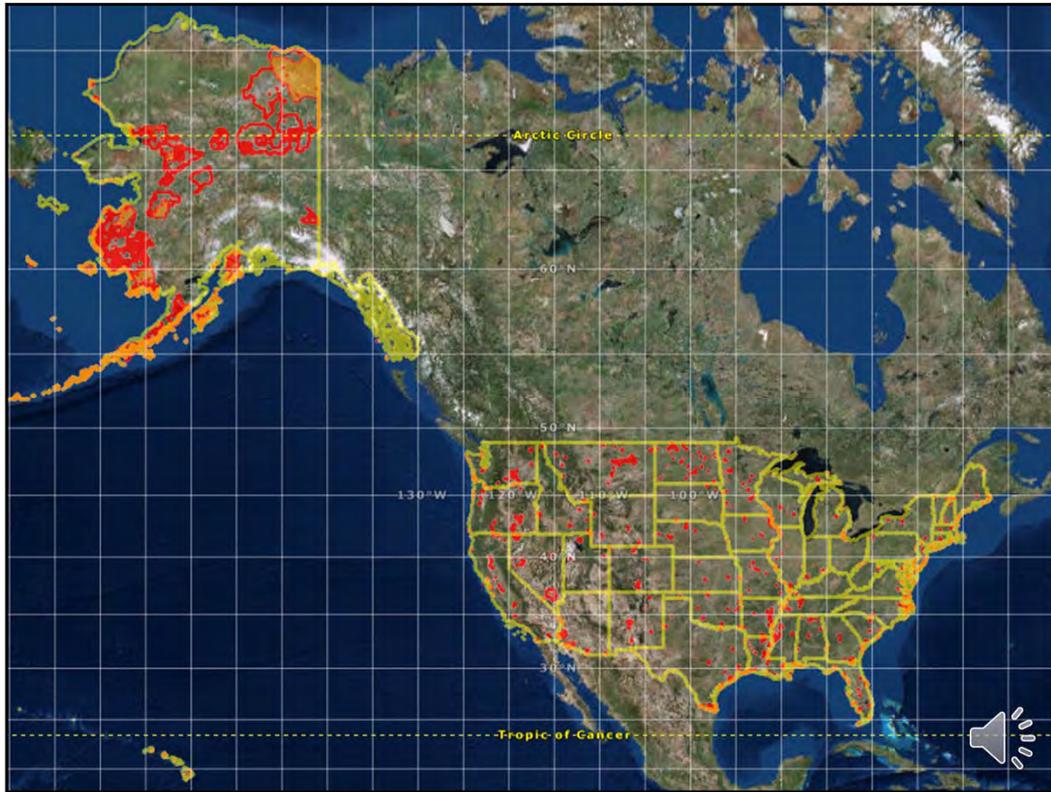
This includes not only mammals, but also, waterfowl and other types of birds.



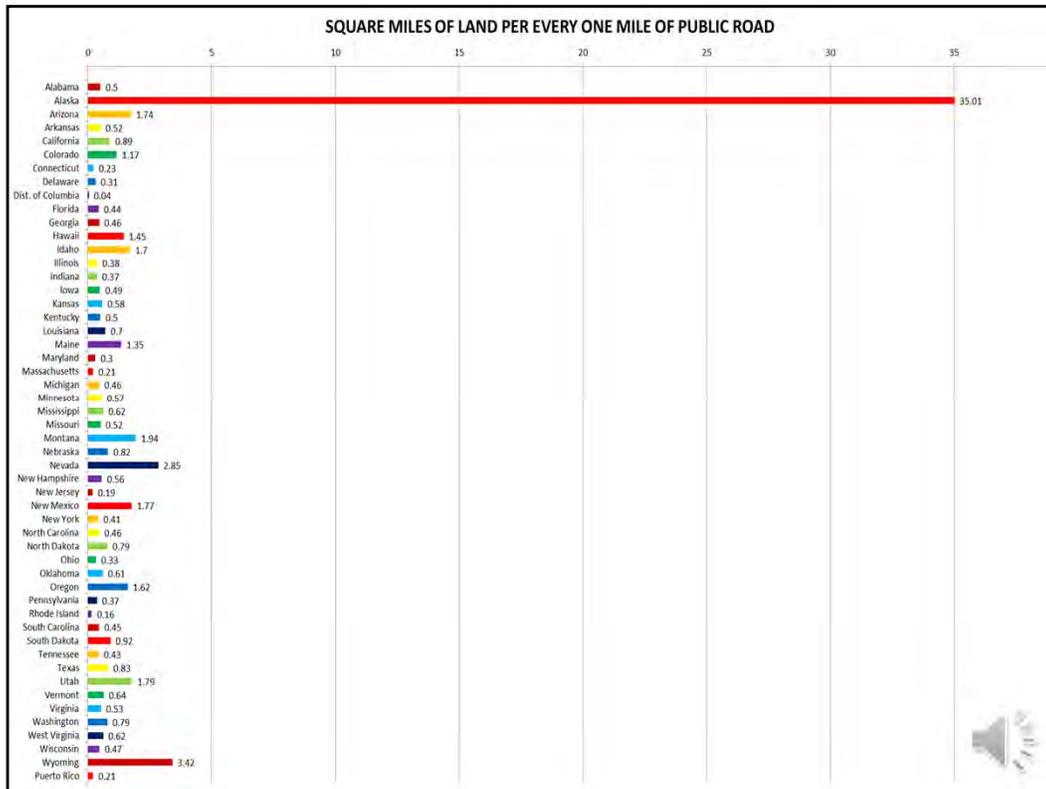
The State of Alaska has used Geographic Information Systems (“GIS”) and data from the FWS and the Federal Highway Administration to analyze roads across NWRs nationwide. This slide depicts NWRs in the contiguous United States shown in red. There are a total of over 15,500 miles of roads contained within our Country’s 562 NWRs.



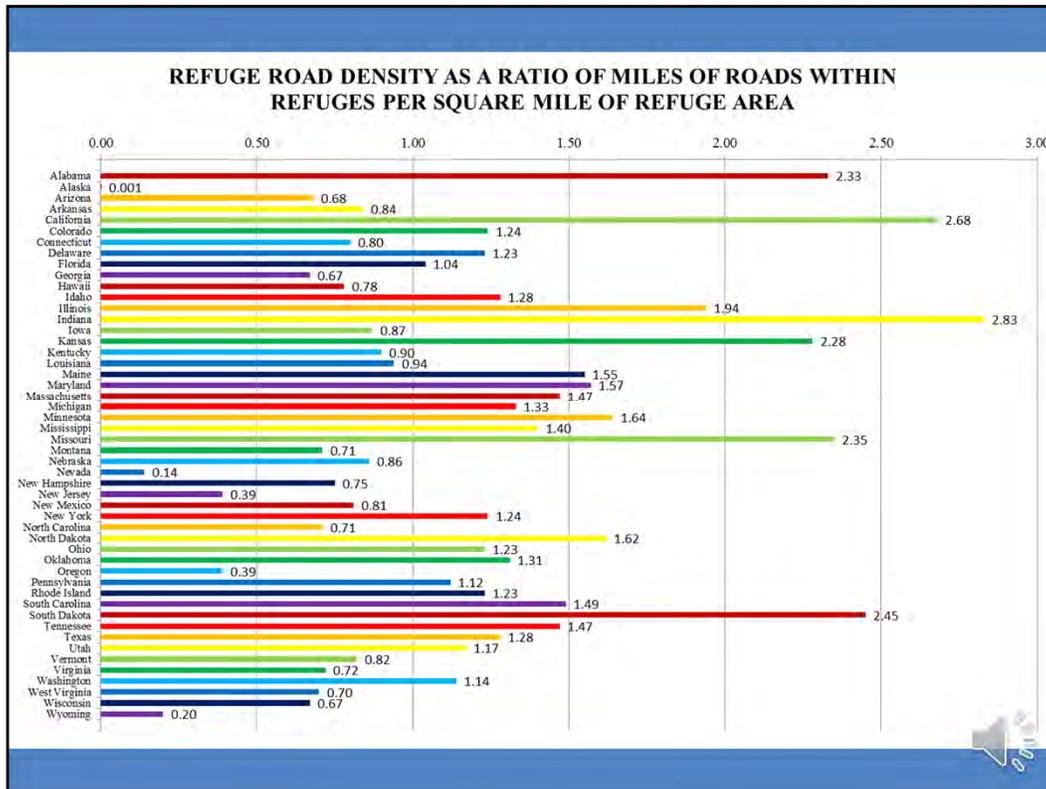
This is an image showing Alaska with its NWRs in red. The orange is wilderness within the refuges. Alaska only has a little over 160 miles of roads within its NWRs.



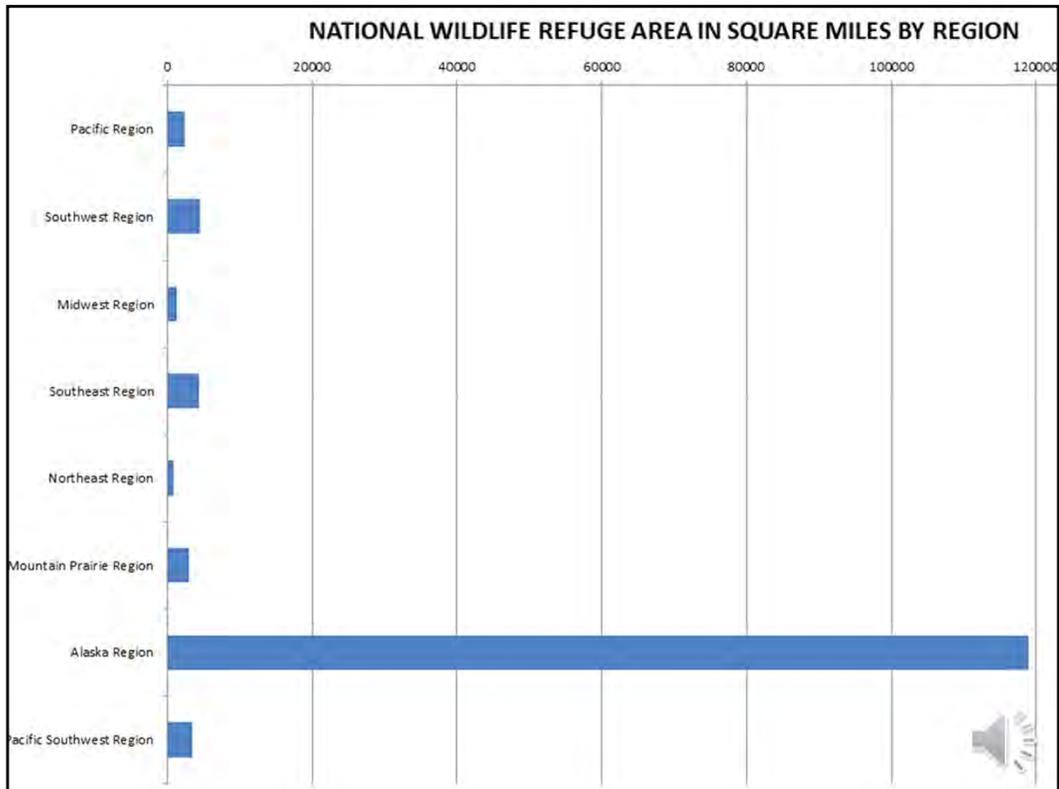
This slide shows the gross disparity between the size and percentage of the State of Alaska that is occupied by NWRs versus the rest of the Country.



This chart shows the ratio of square miles of land by state per every mile of public road within the states. By constructing 10 miles of road through Izembek, Alaska is certainly not at any risk of becoming over-roaded. Given the size of the State, logistics, and the expense of road building, it is unlikely that the Izembek Road will trigger a road building boom in Izembek or other conservation system units.



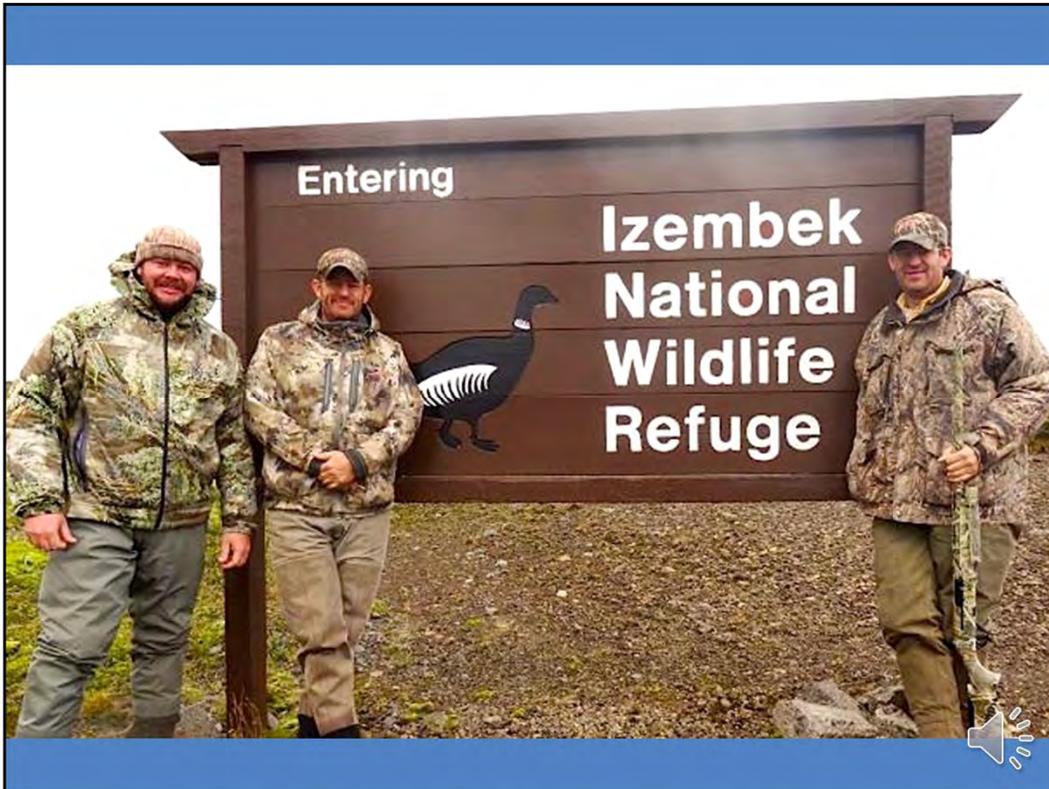
This chart depicts by state NWR road density as a ratio of miles of road within refuges per square mile of refuge area. As can be seen, Alaska is in a category all on its own. No other states come remotely close to Alaska when it comes to road density in NWRs. Alaska has only 1/1000<sup>th</sup> mile of road for every square mile of NWR in the State. Alaska's road density across its NWRs is so low, it is very difficult to even see in this image. Alaska is shown second from the top. The bar is barely visible.



This chart depicts NWR area, in square miles, by Region. Alaska is the only state within the Alaska Region. Again, Alaska is grossly disproportionate to the rest of the Country when it comes to the amount of NWRs within its borders.



This chart displays as a ratio the number of miles of road per square mile of NWR, by region. Again, the Alaska Region, shown second from the bottom, is barely detectable and is in a class all on its own.



Given all this, you would not think that seeking to build a mere 10 miles of life-saving, single lane, low-volume, low-speed road across the Izembek NWR would be too much to ask. This is particularly true given the frequency with which roads exist across NWRs outside of Alaska, and wildlife's apparent ability to co-exist and even thrive despite the presence of roads.

“[B]uilding a road through the Refuge would cause irreversible damage not only to the Refuge itself, but to the wildlife that depend on it.”

Secretary Sally Jewell, DOI Press Release, December 23, 2013



But, according to Secretary Jewell. . . [read slide]

Such a statement defies reality, and imposes a double-standard on Alaska and its citizens.

It is also disingenuous when viewed against the backdrop of National Wildlife Refuges elsewhere the Country.

U.S. Fish & Wildlife Service

Search All Refuges

**Merritt Island**  
National Wildlife Refuge | Florida

A UNIT OF THE  
National Wildlife  
Refuge System

Visit Wildlife & Habitat About the Refuge

WILDLIFE & HABITAT

Birds

Endangered Species

Habitats

Mammals

Reptiles

Wildlife & Habitat



*Merritt Island National Wildlife Refuge was established in 1963 as an overlay of NASA's John F. Kennedy Space Center for the protection of migratory birds. Consisting of 140,000 acres, the Refuge provides a wide variety of habitats: coastal dunes, saltwater marshes, freshwater*

Print Share

FOLLOW US ONLINE

MAPS

MULTIMEDIA

WHAT WE DO

Resource Management

Conservation

Get Involved

Partnerships



Merritt Island NWR is located in Florida. The FWS touts the refuge's long-term working relationship with NASA, and the National Park Service, as quote, "a shining example of how nature and technology can peacefully co-exist." According to the FWS, the refuge provides habitat to more than 1,500 species of plants and wildlife. The refuge also supports one of the highest numbers of endangered and threatened species of any refuge in the Country.



Merritt Island NWR is home to many threatened species such as:

Loggerhead Sea Turtles

Piping Plovers

Eastern Indigo Snakes

Atlantic Salt Marsh Snakes

Florida Scrub Jays

Roseate Terns, and

Southeastern Beach Mice.



Merritt Island NWR is also home to many endangered species, including:

Florida Manatees

Wood Storks

Green Sea Turtles

Hawksbill Sea Turtles

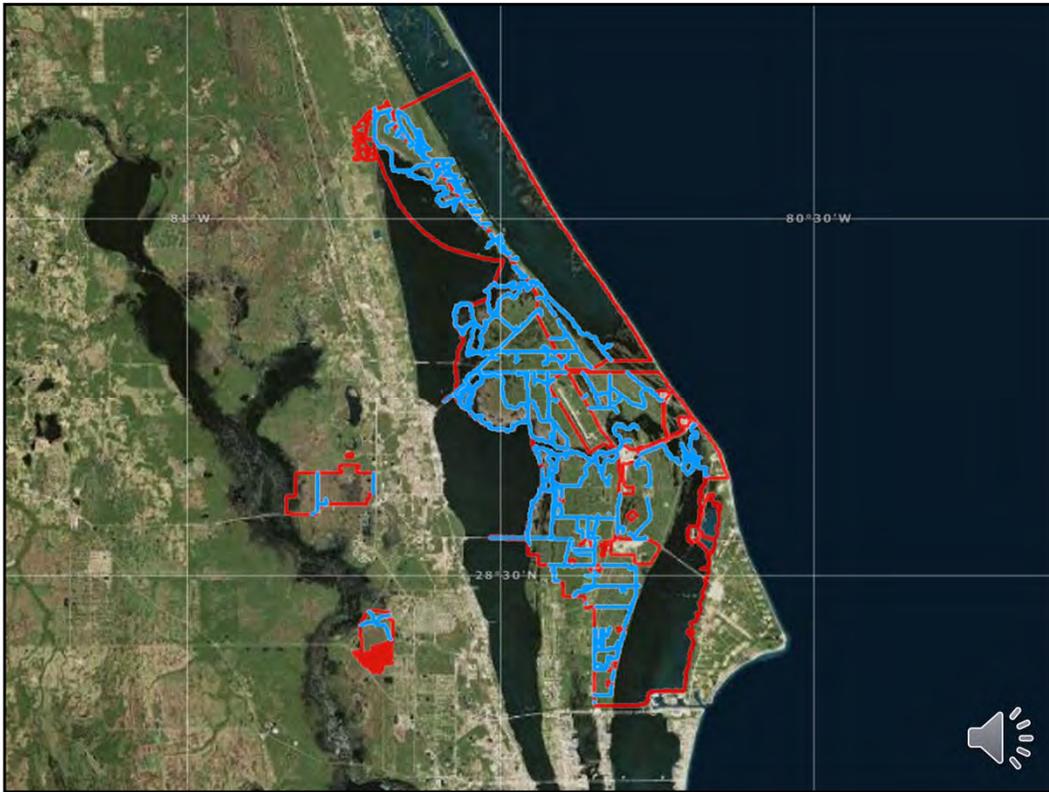
Kemp's Ridley Sea Turtles, and

Leatherback Sea Turtles

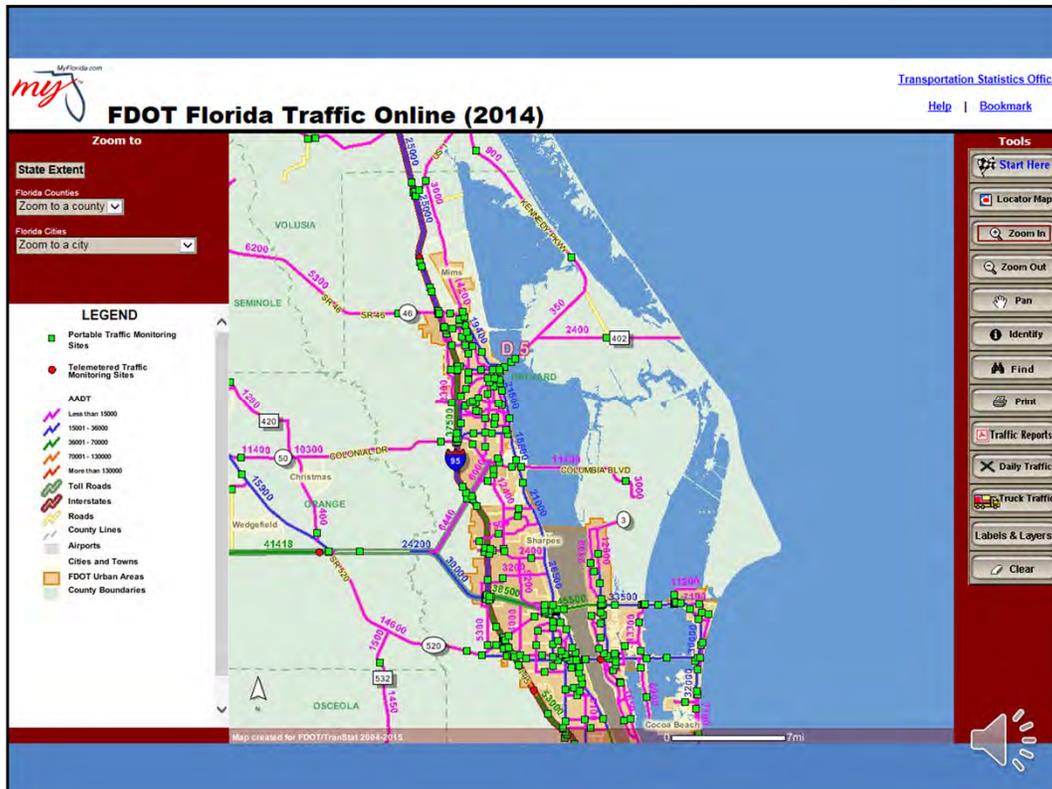


This is a GIS image showing Merritt Island NWR as the large polygone outlined in red on the right side of the image. The interior polygones are inholdings comprised of the Kennedy Space Center’s runway and numerous rocket and space shuttle launch pads.

Due to Secretary Jewell’s grave concerns regarding the impacts to wildlife from the existence of roads within refuges and based on the number of threatened and endangered species present in the Merritt Island NWR, it is difficult to conceive that there would be many roads within the refuge.



But, that's not the case. Here, the refuge's many roads are shown in blue. Merritt Island NWR has over 250 miles of roads within its borders. It has 1.2 miles of road for every square mile of refuge. Izembek has only slightly more than 5/100ths mile of road for every square mile of refuge.



This is a GIS image from the Florida Department of Transportation. It depicts in purple the average annual daily traffic counts on roads in and around Merritt Island NWR. According to the State of Florida, when one only considers the major highways within the refuge, the refuge has over 15,000 vehicles that pass over its roads, on average, each and every day. That is nearly 5.5 million vehicles per year.

In 2011, the FWS reported that the Merritt Island NWR received over 1.1 million visitors.



Around the time of shuttle and rocket launches, there is no shortage of traffic or people at Merritt Island NWR. This is an image of vehicles getting ready to enter the refuge going toward the Kennedy Space Center visitor's complex on the NASA causeway. The refuge boundary is dead ahead just a little over a mile and a half away.



This is what it is like inside Merritt Island NWR during a rocket launch. This is the Max Brewer Memorial Parkway just east of Titusville, Florida.



Visiting Merritt Island NWR, you may even get to witness a rocket launch. A record-setting 24 rocket launches are expected this year alone.

“Once a road is in place, there would be a certainty of increased human access and activity. . . .”

"These species [waterfowl & Tundra Swans] would be particularly vulnerable to the impacts resulting from the construction and operation of a road within the narrow isthmus."

Record of Decision, Izembek National Wildlife Refuge Land Exchange/Road Corridor Final Environmental Impact Statement, December 23, 2013



Per Secretary Jewell’s record of decision on the proposed land exchange which would have allowed construction of the road. . . [read slide]

U.S. Fish & Wildlife Service

Blackwater  
National Wildlife Refuge | Maryland

A UNIT OF THE  
National Wildlife  
Refuge System

*About the Refuge*  
Blackwater National Wildlife Refuge (NWR) was established in 1933 as a waterfowl sanctuary for birds migrating along the Atlantic Flyway.  
[Learn more about the refuge](#)

Visit | Wildlife & Habitat | Seasons of Wildlife | About the Refuge

**VOLUNTEER WORKSHOP**  
*Volunteer at Blackwater!*  
August 15, 2015  
New and seasoned volunteers alike are invited to the Volunteer Workshop on Saturday, August 15, for an update on current refuge projects.  
[Click here for details.](#)

**AROUND THE REFUGE**  
*News and Events*  
All the latest announcements from Blackwater National Wildlife Refuge.  
[Click here](#)  
*2015 - 2016 Hunting*

**ALERT - REFUGE CLOSURES**

**FOLLOW US ONLINE**  
Facebook | Twitter | YouTube | RSS

**MAPS**

**MULTIMEDIA**

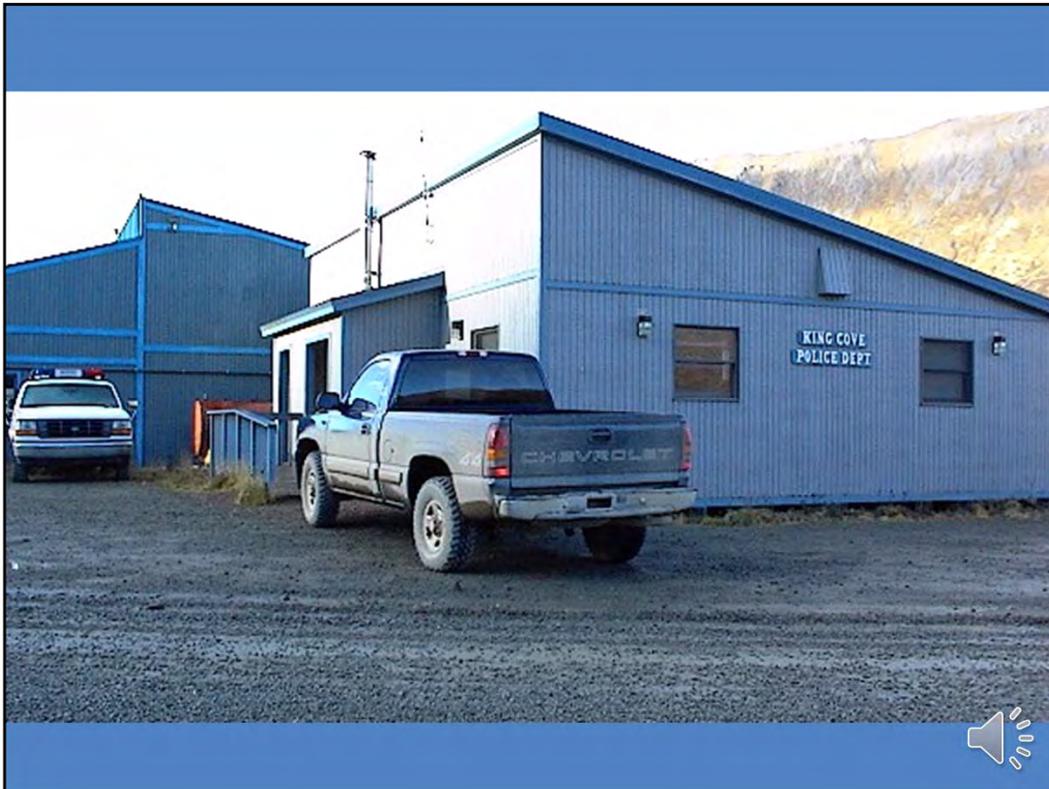
Blackwater National Wildlife Refuge is in Maryland. According to the FWS, the refuge is home to an incredible amount of plant and animal diversity in its three major habitats – forest, marsh and shallow water. The refuge contains one-third of Maryland's tidal wetlands, making it an ecologically important area within the state. Blackwater is recognized as a "Wetland of International Importance" by the Ramsar Convention and was named a priority wetland in the North American Waterfowl Management Plan. Blackwater has also been designated as an Internationally Important Bird Area. Blackwater is home to the largest remaining natural population of the endangered Delmarva peninsula fox squirrel and is also home to the largest breeding population of American bald eagles on the East Coast, north of Florida.



Blackwater NWR is shown here in red. Since the FWS claims that increased human access is so negative when it comes to refuges, and because of Blackwater’s ecological importance, you would not suspect that the refuge would have much in the way of visitation. However, because of its proximity to large metropolitan areas, including Washington, D.C., and Baltimore, Maryland, that is not the case. Instead, Blackwater receives a great deal of use. In 2011, it attracted over 82,000 recreational visitors.



And, that significant amount of recreational use does not even include the average of over 3,000 vehicles that Maryland estimates pass through the refuge each day on its 47 miles of roads shown here in blue.



According to the Alaska Department of Motor Vehicles, there are fewer than 300 registered or titled highway vehicles total in the communities of King Cove and Cold Bay. It is estimated that the average annual daily traffic volume on the single lane, low speed road needed between the two communities would only be a mere 5-20 vehicles per day.

Unlike refuges in the lower 48, neither Izembek, King Cove, nor Cold Bay are connected to a Highway System. In other words, in order to reach the refuge or either community, you must first travel by air or boat over 500 miles from the Alaska Highway System. Taking a ferry from the end of the Highway System in Homer to King Cove costs nearly \$2,000 round-trip. As such, it is not as if construction of this road would open up unlimited opportunities for access to the refuge. Instead, use would be mostly limited to the fewer than 300 registered or titled highway vehicles existing within the two communities.

“[C]onstruction of a road through the Izembek NWR would lead to significant degradation of irreplaceable ecological resources. . . .”

Record of Decision, Izembek National Wildlife Refuge Land Exchange/Road Corridor Final Environmental Impact Statement, December 23, 2013



As stated in the land exchange ROD. . . [read slide]

U.S. Fish & Wildlife Service

Attwater Prairie Chicken  
National Wildlife Refuge | Texas

U.S. Fish & Wildlife Service  
A UNIT OF THE National Wildlife Refuge System

Visit Wildlife & Habitat About the Refuge

WILDLIFE & HABITAT  
Attwaters Prairie-Chicken  
Wildlife  
Habitat  
Resource Management

### Attwaters Prairie-Chicken



*Over a century ago, up to one million Attwater's prairie-chickens graced the coastal prairies of Texas and Louisiana. Each spring, males gathered to perform an elaborate courtship ritual.*

Print Share

FOLLOW US ONLINE

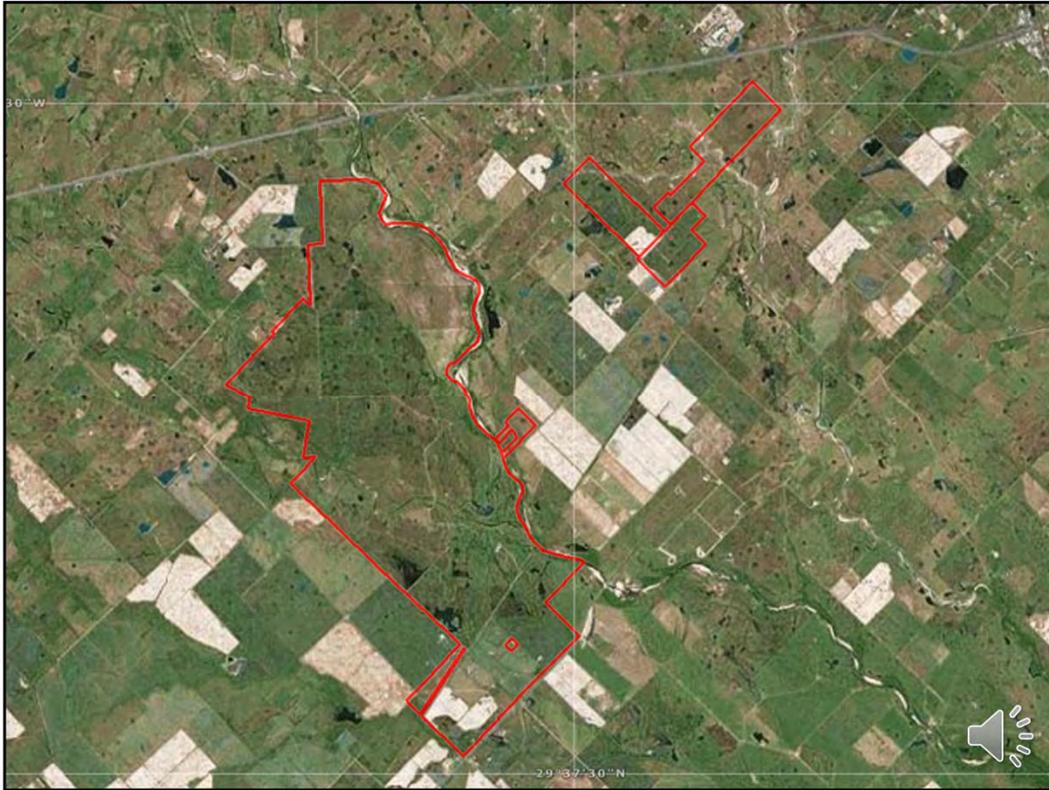
MAPS

MULTIMEDIA

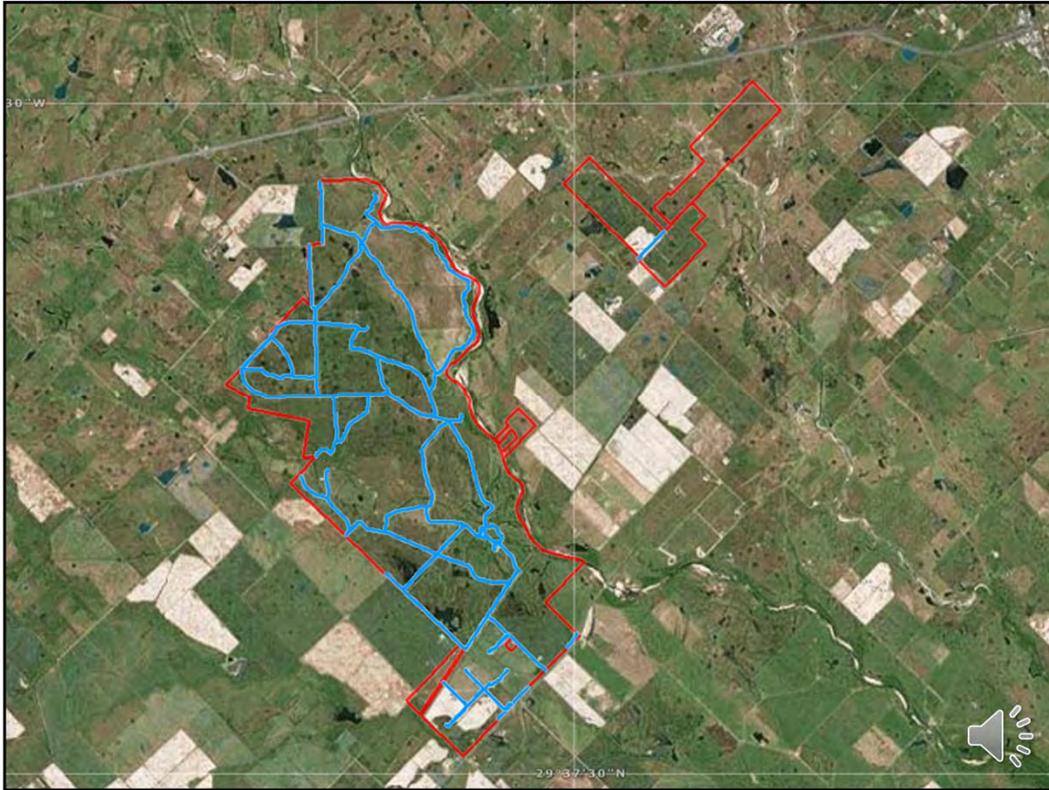
WHAT WE DO

- Resource Management
- Conservation
- Get Involved
- Partnerships
- In The Community
- Science

The Attwater Prairie Chicken National Wildlife Refuge is located in Texas. The refuge is one of the largest remnants of coastal prairie habitat remaining in southeast Texas. It is also home to one of the last populations of the critically endangered Attwater's prairie-chicken, a ground-dwelling grouse of the coastal prairie ecosystem. The Attwater's prairie-chicken is considered one of the most endangered birds in all of North America.



This is an image of the boundaries of the Attwater Prairie Chicken NWR. Given the FWS's concerns regarding impacts to wildlife and habitat from a potential road across IZembek and since the Attwater Prairie Chicken NWR is home to one of the most critically endangered ground-dwelling birds in North America, it is difficult to conceive of roads existing across this refuge.



However, according to FWS and the FHWA's data, this relatively small 16 square mile refuge, is occupied by over 40 miles of roads. It contains 2.7 miles of road for every square mile of refuge. This is again compared to Izembek's slightly greater than 5/100ths mile of road for every square mile of refuge.

“The proposed road would have a major impact on bears. The road would fragment undisturbed habitat. . . alter the behavior of wildlife in the area as well as their use of adjacent habitats. The road will likely result in reduced bear densities and poorer habitat because of increased access and all-terrain vehicle-human activities, harvests and other human/bear conflict that comes with increased access created by the road.”

Record of Decision, Izembek National Wildlife Refuge Land  
Exchange/Road Corridor Final Environmental Impact Statement,  
December 23, 2013



According to the land exchange ROD. . . [read slide]

U.S. Fish & Wildlife Service Search  All Refuges



# Tensas River

National Wildlife Refuge | Louisiana



A UNIT OF THE  
National Wildlife  
Refuge System

---

Visit 
Wildlife & Habitat
About the Refuge

**WILDLIFE & HABITAT**

Birds

Mammals

Amphibians and Reptiles

Fish

Invertebrates

Habitats

## Wildlife & Habitat



*Tensas River NWR is a haven for all types of wildlife. From enormous Louisiana black bears to the tiniest of amphibians, the refuge is home to over 400 different species.*

---

### Birds

Many different species of birds inhabit Tensas River NWR.

[Print](#) [Share](#)

**ALERT - GPS UNITS ARE NOT ACCURATE WHEN NAVIGATING TO THE REFUGE VISITOR CENTER!!**

**FOLLOW US ONLINE**

[Facebook](#) [Twitter](#) [YouTube](#) [Instagram](#)

**MAPS**

**MULTIMEDIA**

**WHAT WE DO**

[Resource Management](#)

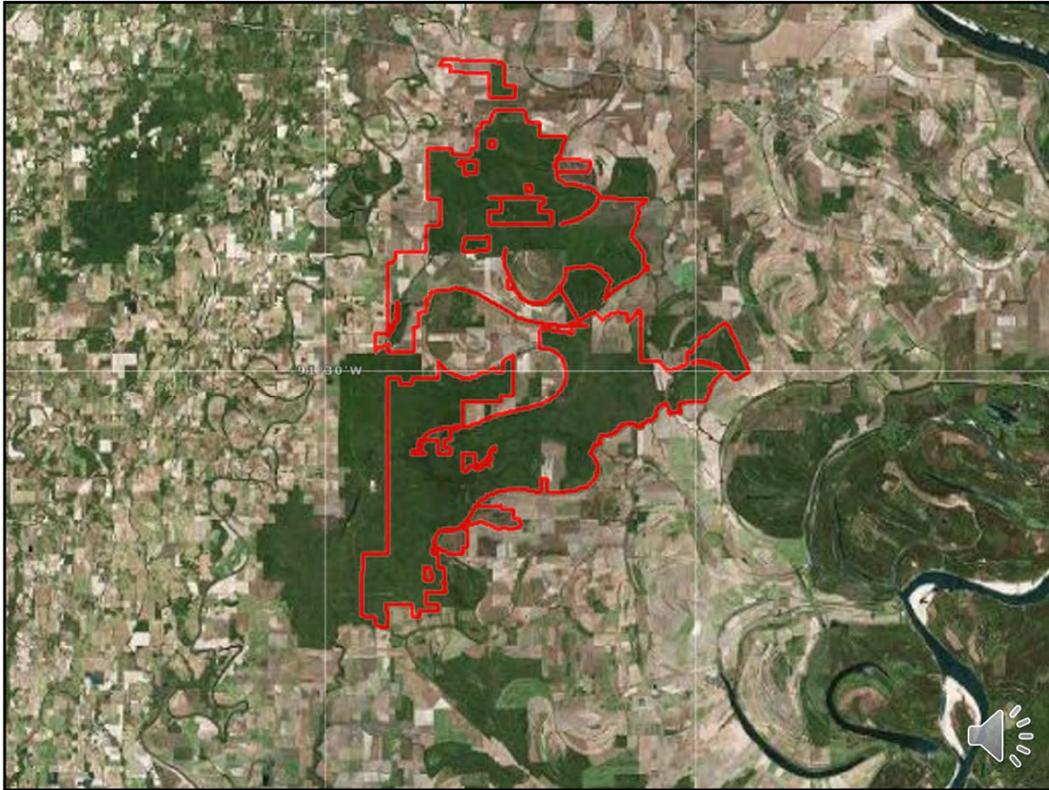
[Conservation](#)

[Get Involved](#)

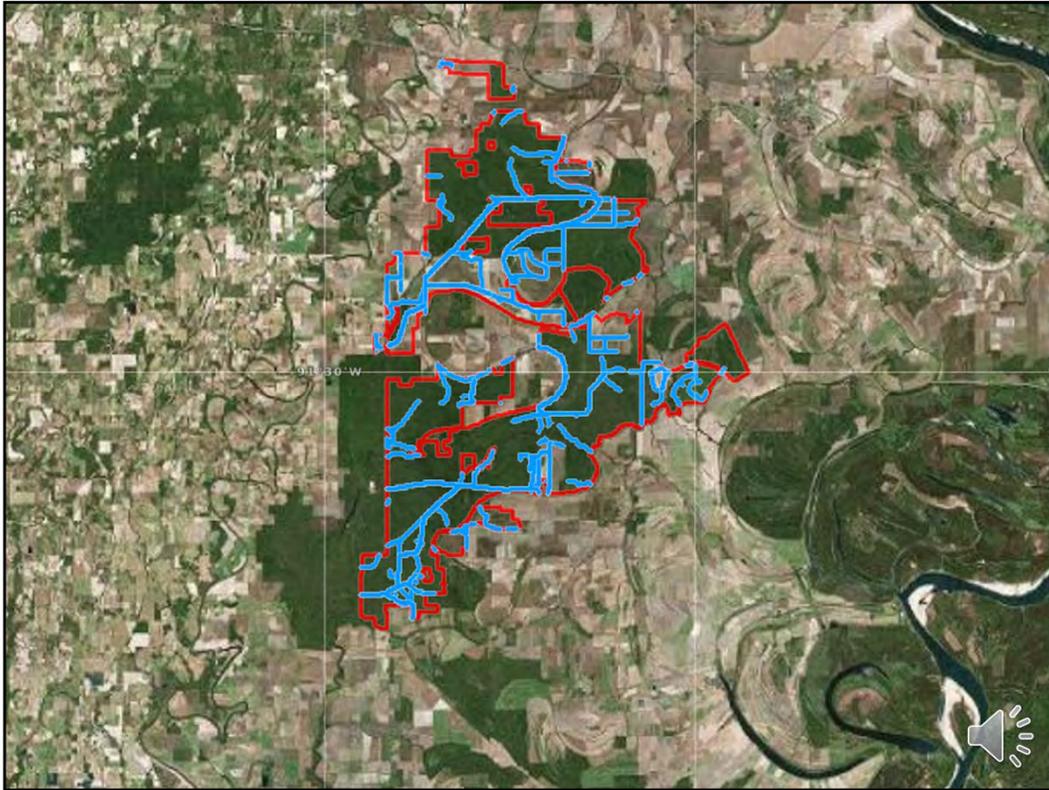
[Partnerships](#)



The Tensas River NWR is located in Louisiana. The Refuge is home to the state's largest population of the federally-listed threatened Louisiana black bear. The bears live throughout the refuge alongside healthy populations of white-tailed deer, American alligators, and other native wildlife species. The last sighting of the ivory-billed woodpecker, thought by most scientists to be extinct, occurred in the 1940's on land adjacent to the refuge.



Shown in red are the boundaries of the refuge. Based on the fact that this refuge is home to the largest population of the threatened Louisiana black bear, and based on the Service's suggestion of how harmful roads are to bears and their habitat, one would think that there would be few roads within this refuge.



However, according to FWS and FHWA data, this refuge contains over 210 miles of roads. It has 1.7 miles of road for every square mile of refuge. This is again compared to Izembek's 5/100ths.

U.S. Fish & Wildlife Service

Pocosin Lakes  
National Wildlife Refuge | North Carolina

A UNIT OF THE  
National Wildlife  
Refuge System

*About the Refuge*  
... a unique place for wildlife... and people  
too!  
*Open Daylight Hours. Enjoy!*

Visit Wildlife & Habitat Seasons of Wildlife About the Refuge

FEATURES

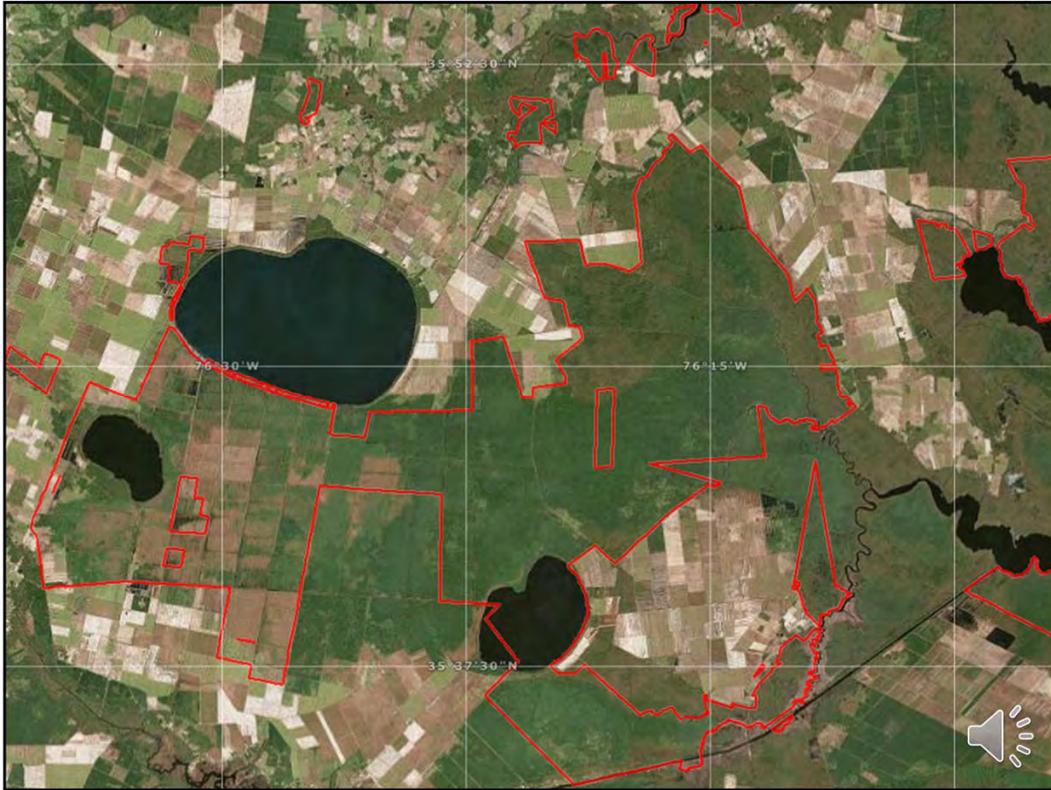
*Gateway to eastern NC Refuges*  
The National Wildlife Refuges Visitor Center on  
Roanoke Island is open daily, year-round, is FREE,  
and offers the experience of a lifetime!  
*National Wildlife Refuges Visitor Center*

FOLLOW US ONLINE

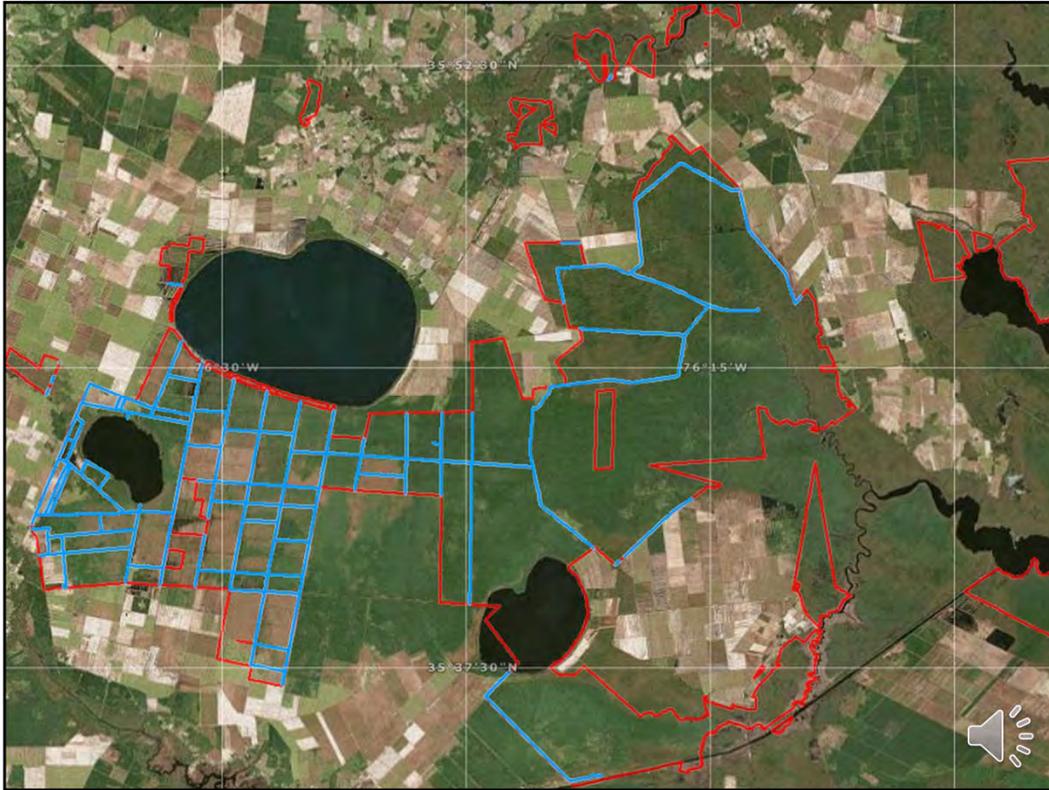
MAPS

MULTIMEDIA

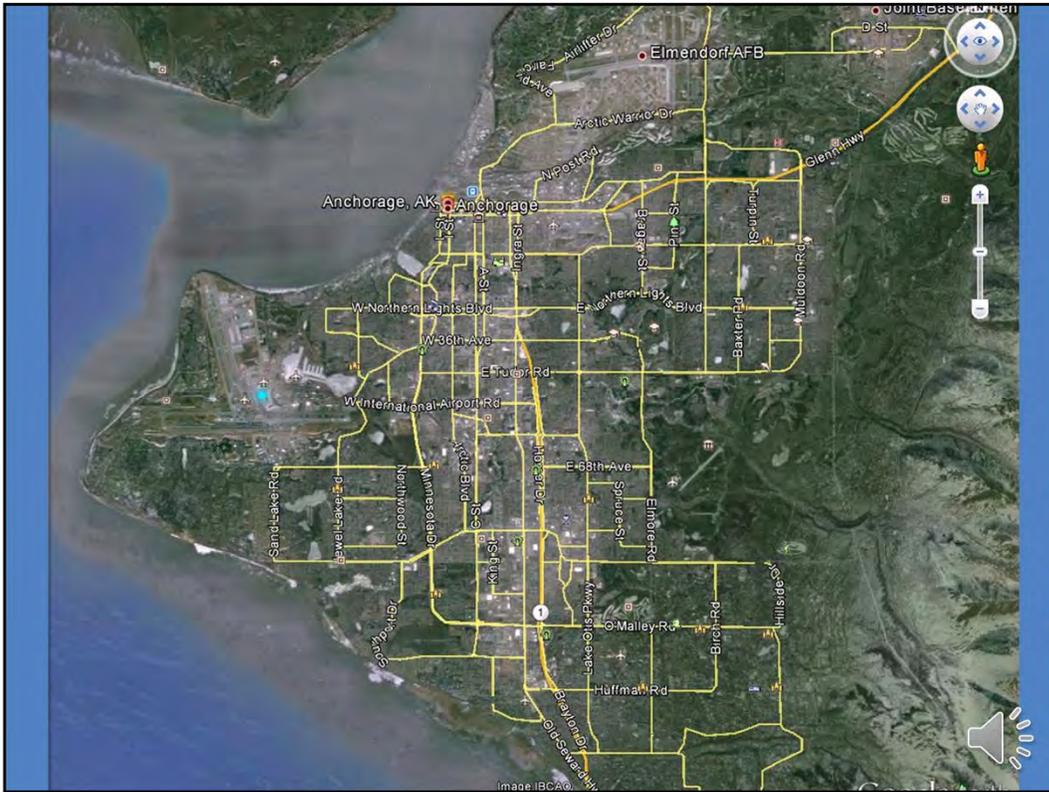
Pocosin Lakes NWR is located in North Carolina. It is the home to only the population of endangered wild, free-roaming red wolves in the world. It also supports several clusters of endangered red cockaded woodpeckers. And, Pocosin has one of the densest populations of American black bears reported anywhere in scientific literature.



Given FWS's arguments for how harmful roads are for bears and because this refuge is home to such a dense population of bears and is also so important to endangered red wolves, it is difficult to conceive of any roads existing in this refuge.



However, Pocosin has over 160 miles of roads within its borders. It has nearly a mile of road for every square mile of refuge area. Clearly, roads are not near as detrimental to bears and their habitat as the FWS suggests. After all, as anyone living in Anchorage is aware, bears can thrive in very populous communities with high road densities.



This is Anchorage, Alaska. Anchorage has the highest population of people and greatest concentration of roads of anywhere in the State. Over 300,000 people live in Anchorage. Yet, it is estimated that Anchorage is home to 200 – 300 black bears and over 40-60 grizzly bears.



These are several of Anchorage's many bear inhabitants. As both Anchorage, Tensas River and Pocosin Lakes NWRs demonstrate, bears, roads and people, can reasonably co-exist.

“Nothing is more contradictory with, or destructive to, the concept of Wilderness than construction of a road. The impact of road construction on wilderness character would radiate far beyond the footprint of the road corridor. It would irreparably and significantly impair this spectacular Wilderness refuge.”

Record of Decision, Izembek National Wildlife Refuge Land  
Exchange/Road Corridor Final Environmental Impact Statement,  
December 23, 2013



According to the land exchange ROD. . . [read slide]

U.S. Fish & Wildlife Service

Search

All Refuges



# Kofa

National Wildlife Refuge | Arizona

A UNIT OF THE National Wildlife Refuge System



Visit Wildlife & Habitat About the Refuge

FEATURES



## Leaping Hares

Look for this refuge resident - the jackrabbit. With their tall hind legs, they can reach speeds of up to 40 mph and leap over 10 feet.

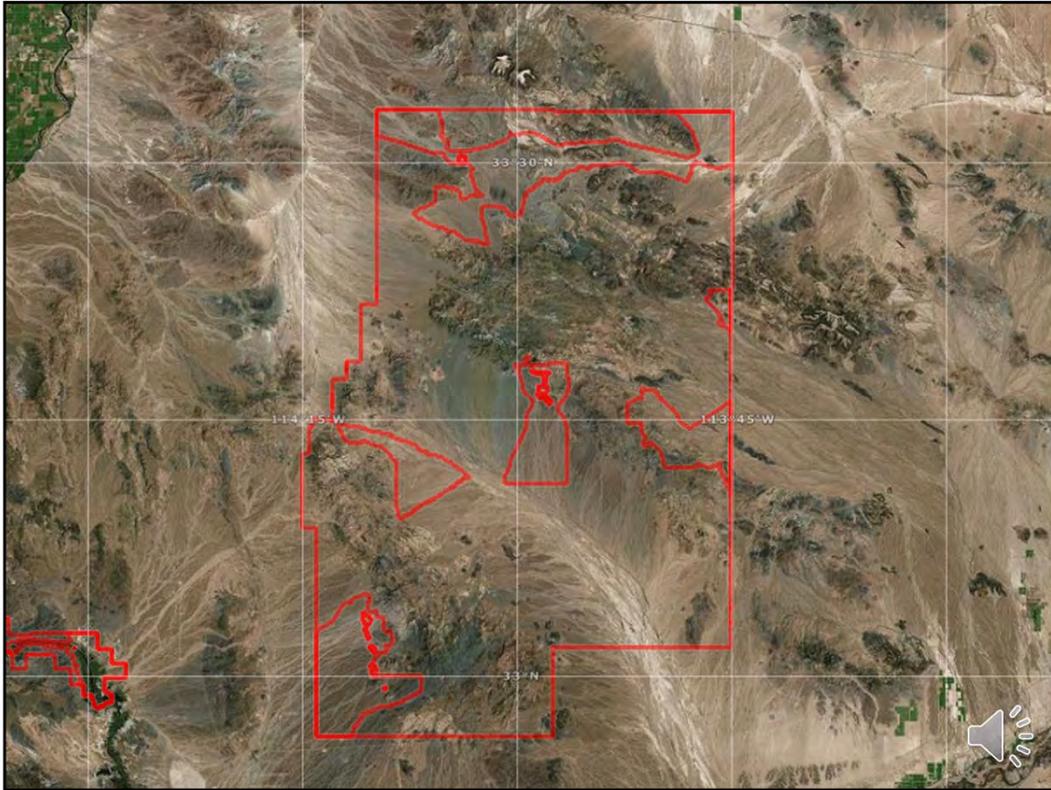
FOLLOW US ONLINE

MAPS

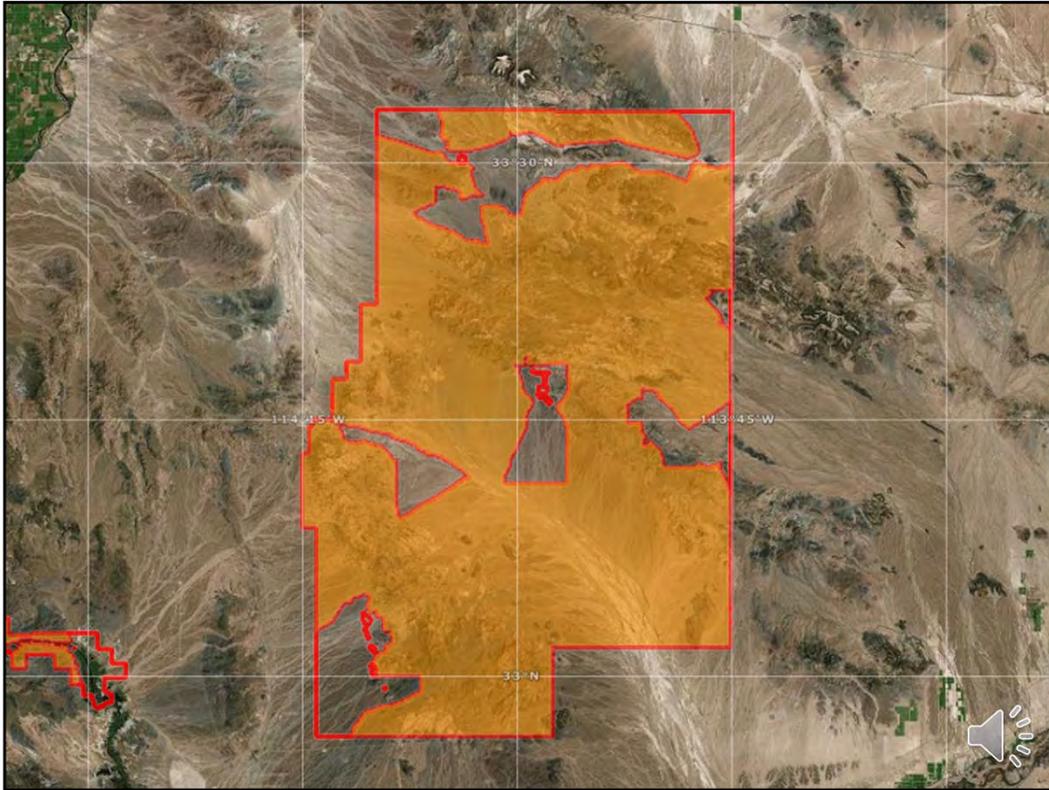
MULTIMEDIA

WHAT WE DO

Kofa National Wildlife Refuge is located in Arizona. Kofa is unique among refuges in the lower 48 in that over 82% of the refuge is within federally designated wilderness.



In this image, Kofa NWR is outlined in red. As you can see, there are a number of inholdings within Kofa.



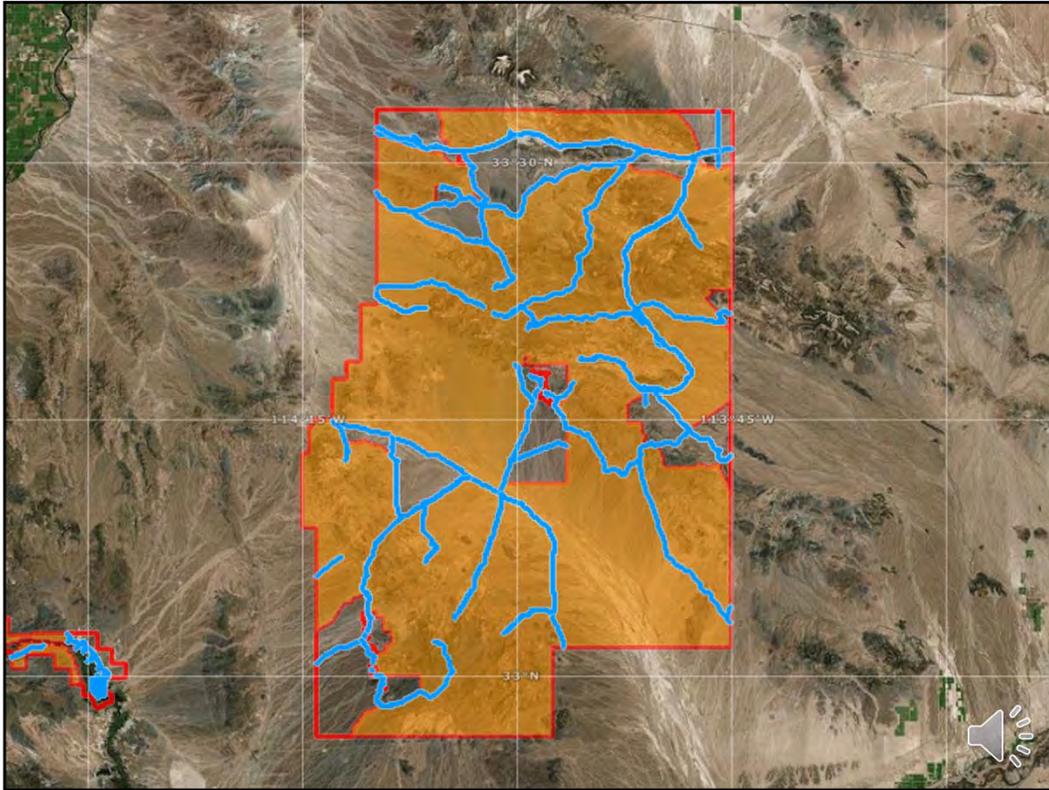
Here, the wilderness area portions of the refuge are shown in orange. Since Secretary Jewell has said it is unacceptable to consider placing a road within wilderness and considering so much of Kofa NWR is within wilderness, you would not expect it to contain any roads.

“ATV/UTV use is a big recreational component in this area. There are designated roads throughout Kofa NWR. . .”

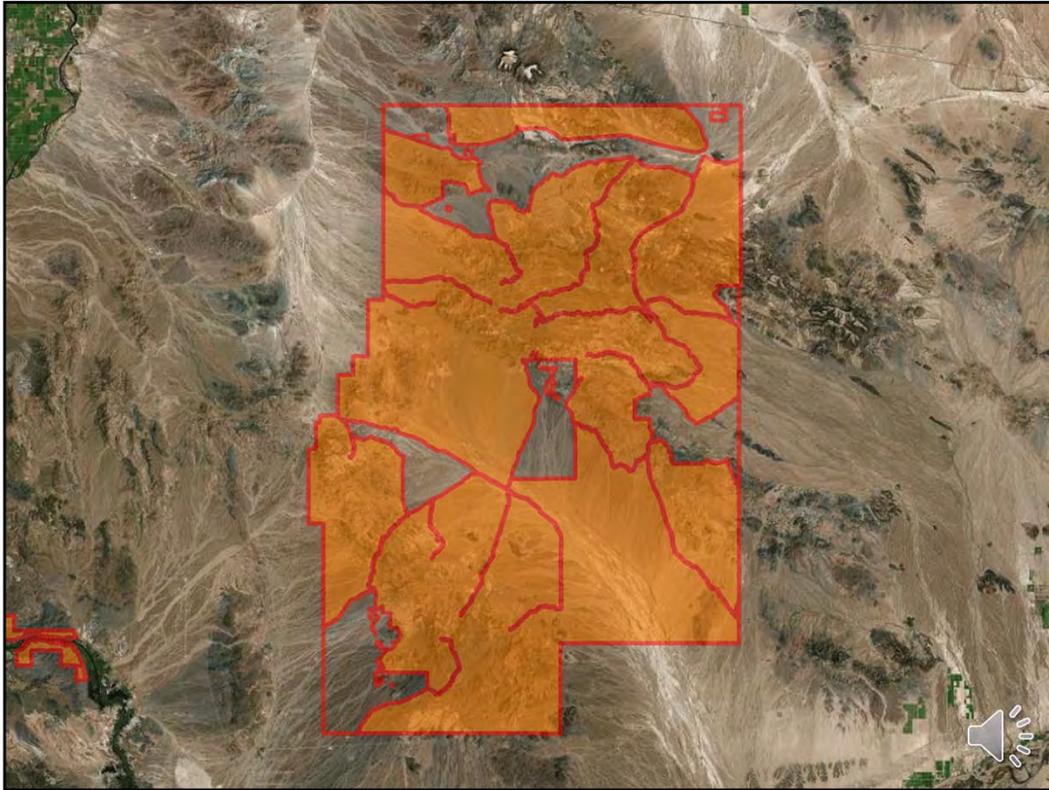
FWS National Wildlife Refuge System Wilderness Fellows – Report  
on Wilderness Character Monitoring, September 12, 2011



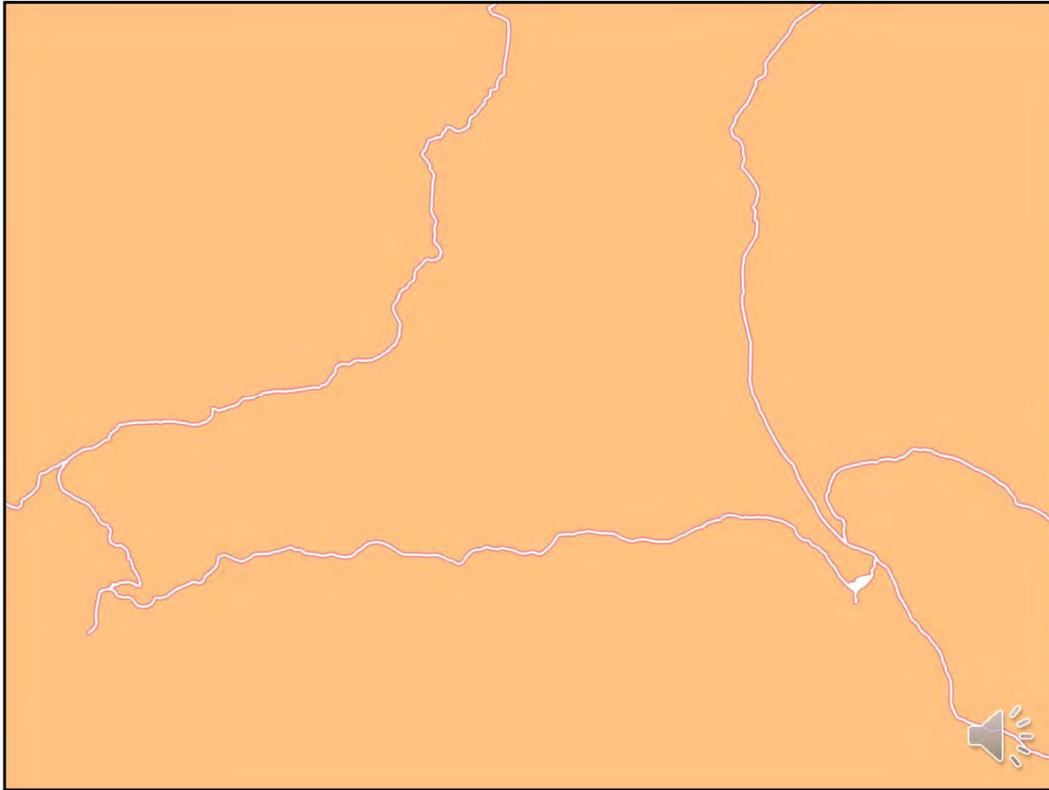
However, as the FWS has acknowledged. . . [read slide]



This is Kofa NWR with its roads shown in blue. In fact, Kofa has a staggering over 400 miles of roads, the vast majority of which are within federally designated wilderness. Kofa is not unique. Instead, there are numerous examples of other wilderness areas within NWRs that contain roads.



The FWS will likely claim that it does not have roads within wilderness in its refuges. It may attempt to point to images such as this one. In this image, Kofa's wilderness is again shown in orange and the refuge boundaries are depicted in red. What appear to be red lines in the location of Kofa's many roads are in fact 200 foot wide corridors that the agency has sought to exclude from the wilderness as a buffer around existing roads. This is what is termed by the BLM as cherry stemming. Cherry stemming is where administratively, on paper, a corridor is created around a road so as to exclude it from the classification given to the adjacent land. In other words, in this instance, to try and exclude it from being characterized as wilderness.



This is a close-up of a portion of Kofa, using a white background, in order to show how the FWS has attempted to cherry stem road corridors within wilderness. The orange is wilderness and the white are the 200 foot wide road corridors. Cherry stemming begs the question - If it is apparently so easy and beneficial for the FWS to exclude a road corridor from existing wilderness, why can't that be done in Izembek?

“Izembek is an extraordinary place -- internationally recognized as vital to a rich diversity of species -- and we owe it to future generations to think about long-term solutions that do not insert a road through the middle of this Refuge and designated wilderness. . . .”

Secretary Sally Jewell, DOI Press Release, December 23, 2013



According to Secretary Jewell . . . [read slide]

U.S. Fish & Wildlife Service

Search All Refuges

# Medicine Lake

National Wildlife Refuge | Montana

A UNIT OF THE National Wildlife Refuge System

Visit Wildlife & Habitat About the Refuge

FEATURES

**A Success Story!**  
*A prairie falcon delivered by refuge staff to the Montana Raptor Conservation Center with a broken leg and wing was released on November 1.*

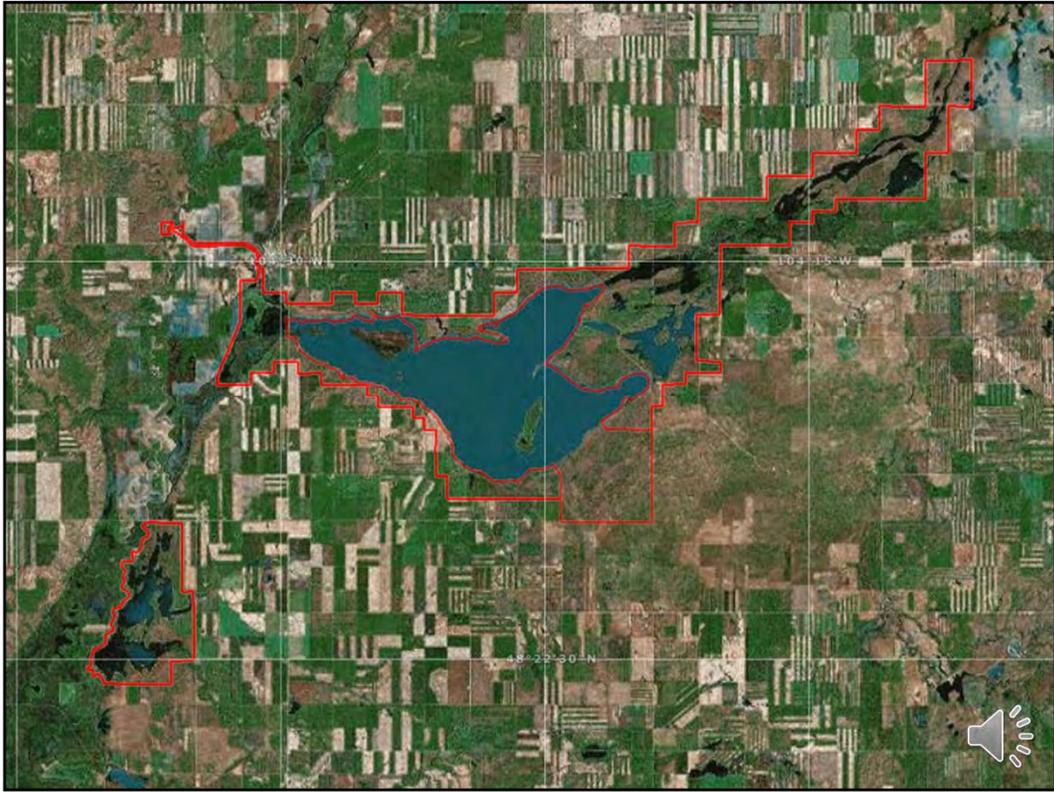
FOLLOW US ONLINE

MAPS

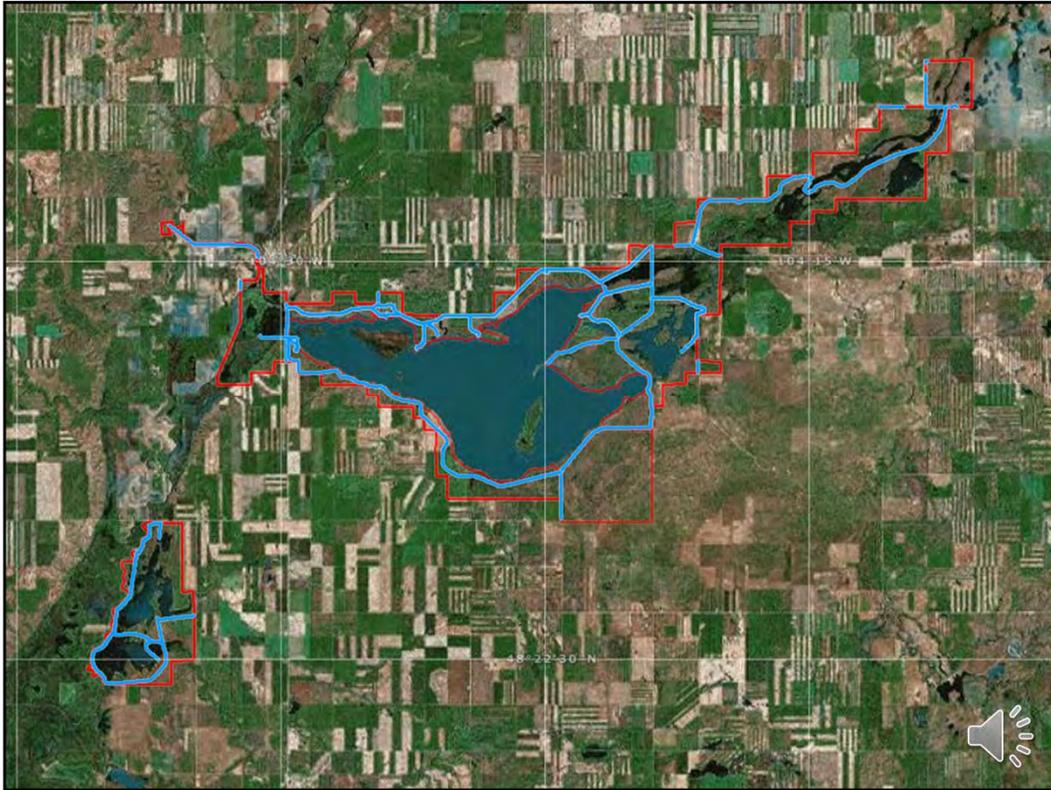
MULTIMEDIA

WHAT WE DO  
*Resource Management*

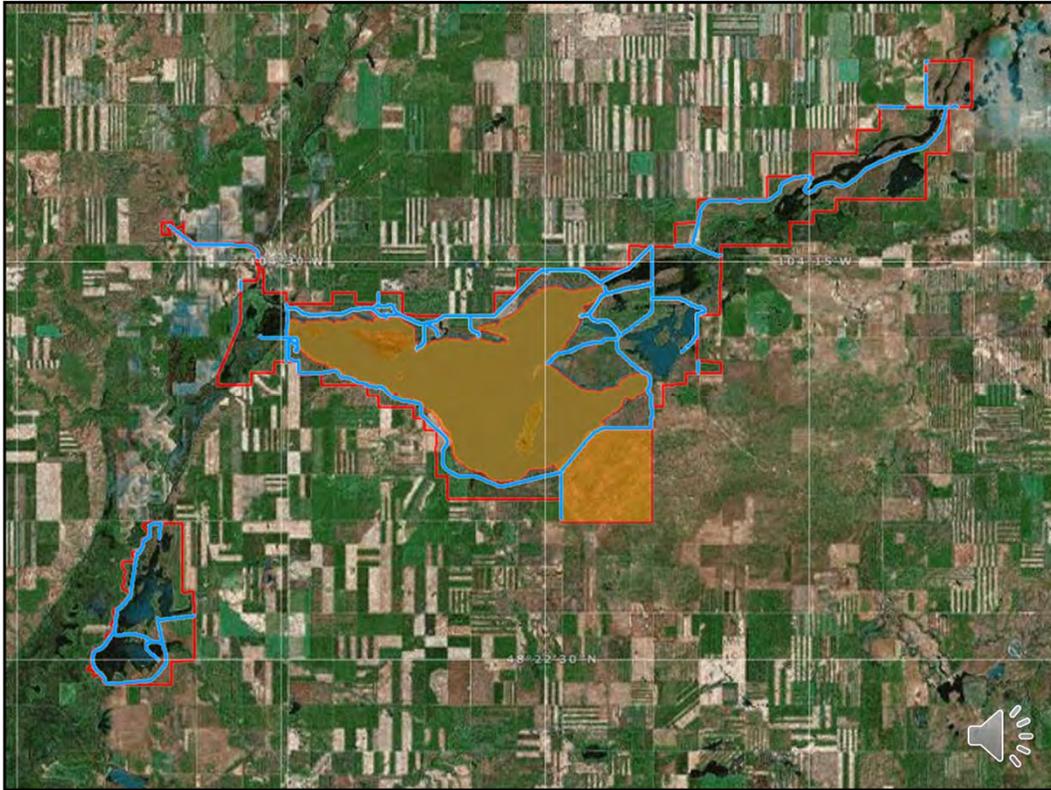
Medicine Lake NWR is located in eastern Montana. It is home to threatened Piping Plovers and endangered Whooping Cranes. It is also the site of one of the largest American White Pelican rookeries. 250,000 waterfowl may stop over on this refuge during migration. Like Izembek, this important waterfowl refuge also contains federally designated wilderness.



This shows Medicine Lake National Wildlife Refuge outlined in red.



Medicine Lake NWR also has over 75 miles of roads. It has over 1.5 miles of road for every square mile or refuge area.



Many of these roads are within, border or bisect federally designated wilderness in the refuge shown in orange.

"The Service has consistently found that the impacts of building a proposed road on the wildlife resources, habitats and designated Wilderness would create irreversible change and damage to a unique and ecologically important area, and especially to designated Wilderness."

Record of Decision, Izembek National Wildlife Refuge Land  
Exchange/Road Corridor Final Environmental Impact Statement,  
December 23, 2013



According to the land exchange ROD. . . [read slide]

U.S. Fish & Wildlife Service

Search All Refuges

**Mingo**  
National Wildlife Refuge | Missouri

A UNIT OF THE  
National Wildlife  
Refuge System

Visit Wildlife & Habitat Seasons of Wildlife About the Refuge

LEARN MORE  
History  
Satellite Refuges

## About the Refuge



*Mingo National Wildlife Refuge was established in 1944 under the authority of the Migratory Bird Treaty Act as a resting and wintering area for waterfowl and other migratory birds, and for the preservation of bottomland hardwood forest.*

The refuge contains 21,592 acres and lies in a basin formed in an ancient abandoned channel of the Mississippi River. Mingo National Wildlife Refuge also contains a 7,730-acre Wilderness Area designated as Wilderness by Congress under the 1964 Wilderness Act to "...protect and preserve the wilderness character...for the use and enjoyment of the American people in a way that will leave their successors an inheritance of the same natural resources and wilderness."

Print Share

FOLLOW US ONLINE

MAPS

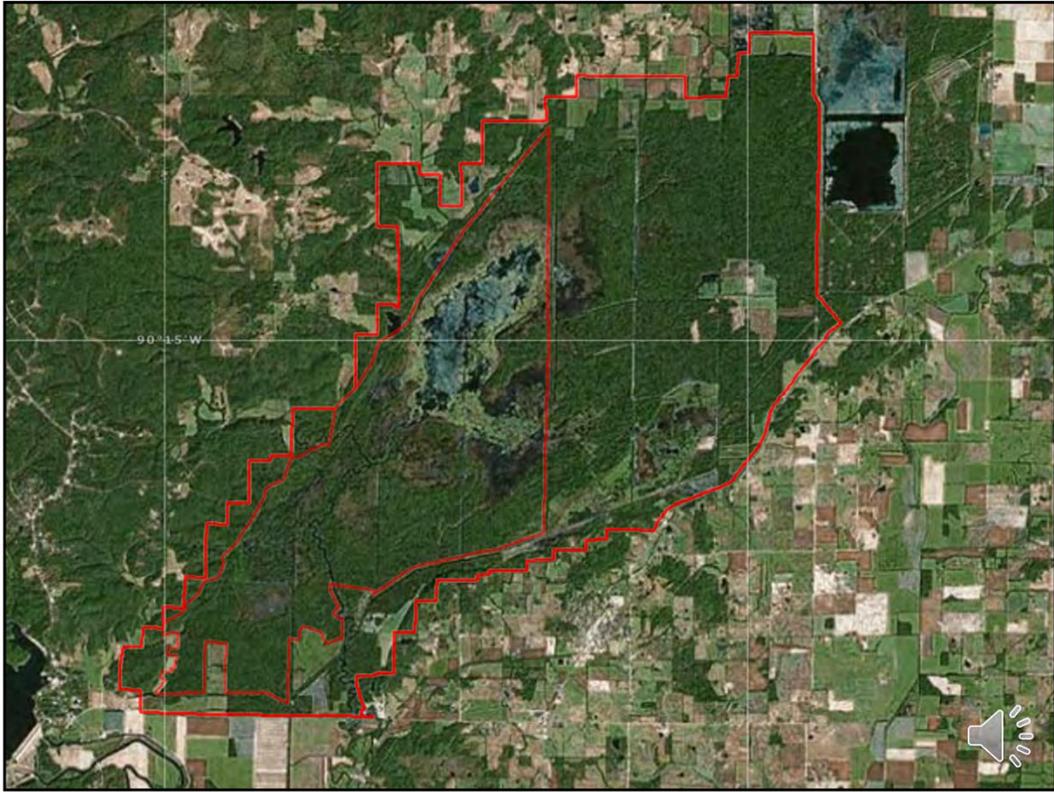
MULTIMEDIA

WHAT WE DO

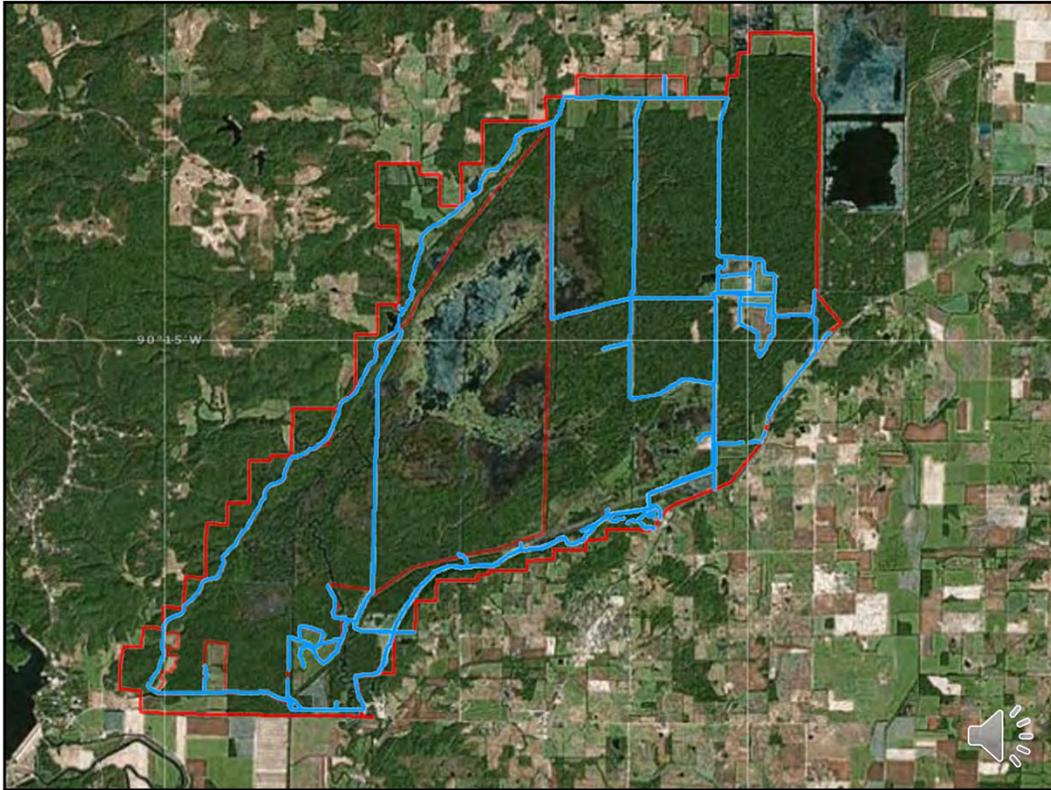
- Resource Management
- Conservation
- Get Involved
- Partnerships



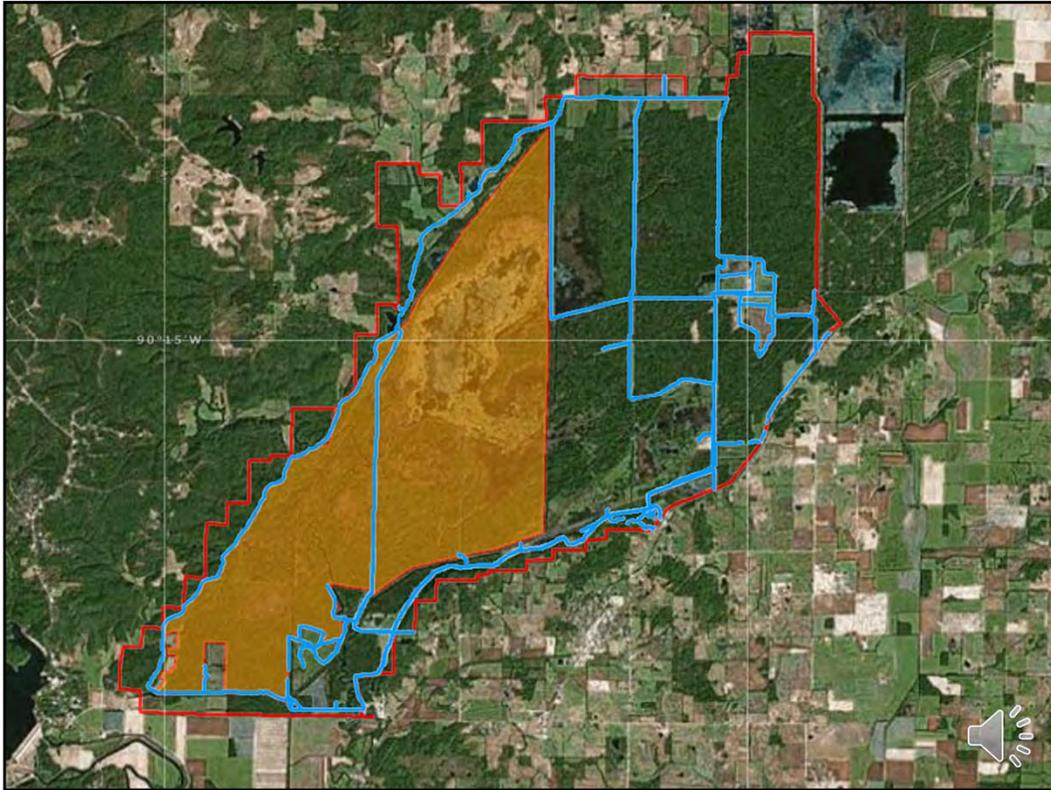
This is Mingo NWR in Missouri. Like Izembek, Mingo also contains federally designated Wilderness. Mingo's wilderness area is nearly 8,000 acres.



Here, the refuge is outlined in red.



As we have seen with most of the refuges, there are no shortage of roads within Mingo. In fact, Mingo has nearly 80 miles of roads within its borders.

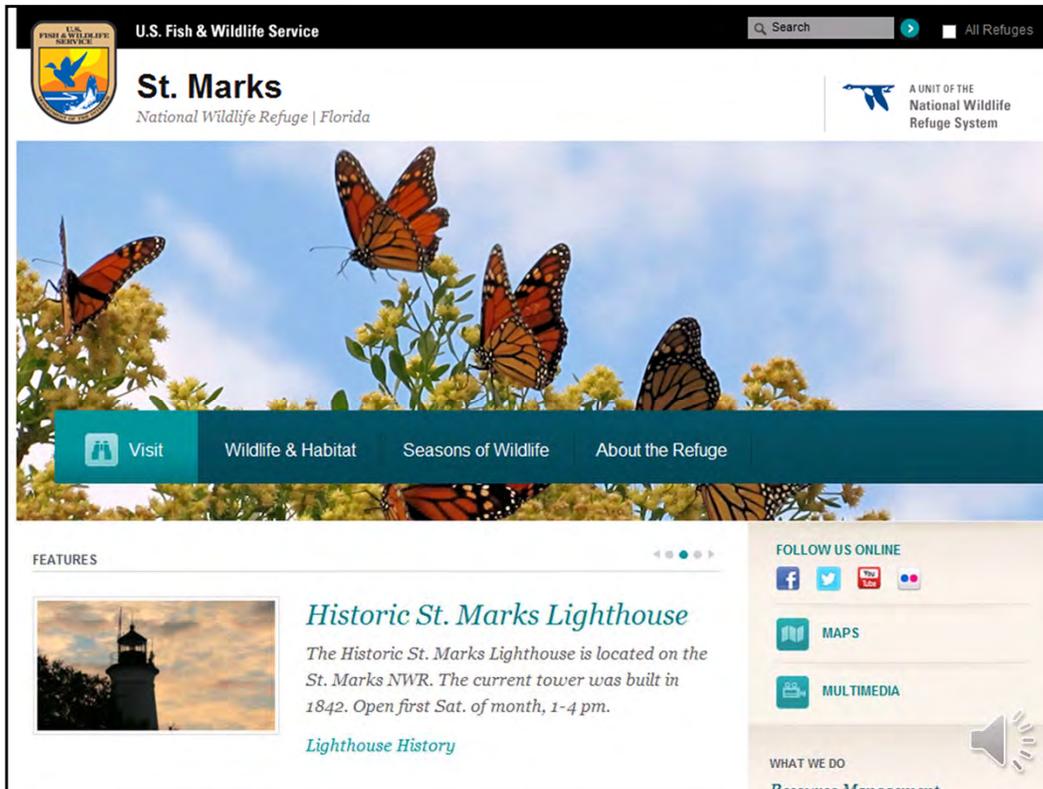


And, those roads virtually surround and even bisect the wilderness portion of the refuge shown here in orange.

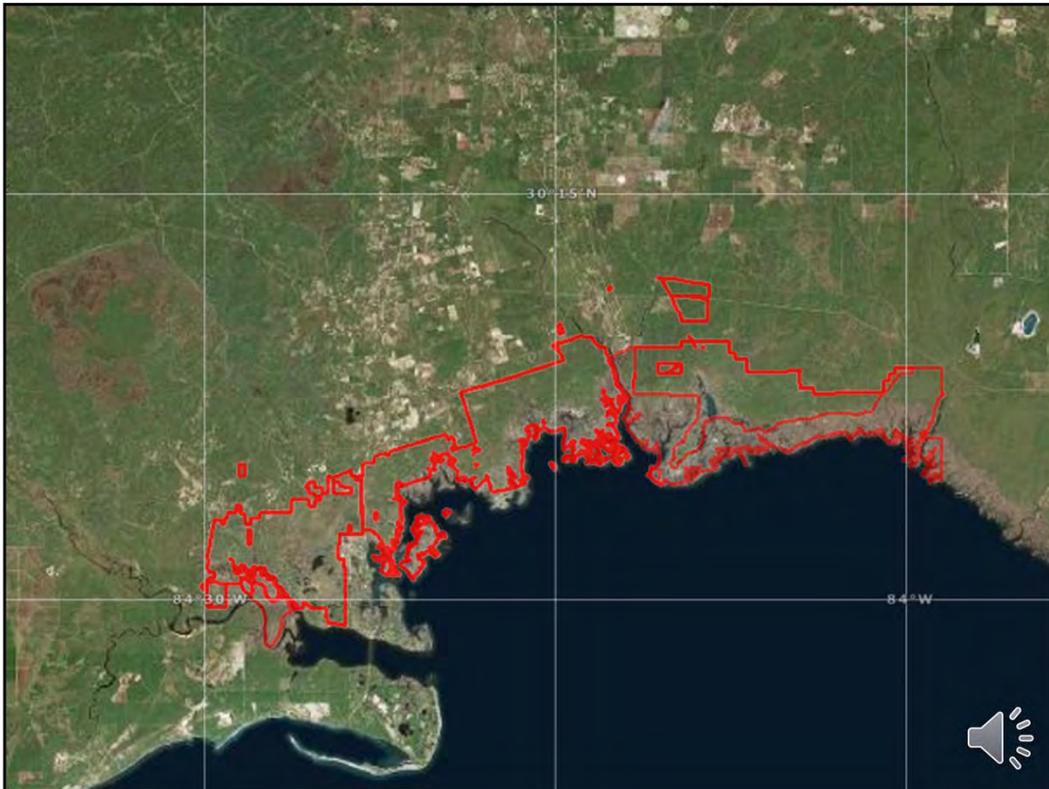
“The Service has determined that the increased acreage would not compensate for the overall values of the existing Izembek Refuge lands and Wilderness that would be removed. Nor would the offered lands compensate for the anticipated impacts that the proposed road would have on wildlife and the habitat that surround the road corridor.”

Record of Decision, Izembek National Wildlife Refuge Land  
Exchange/Road Corridor Final Environmental Impact Statement,  
December 23, 2013

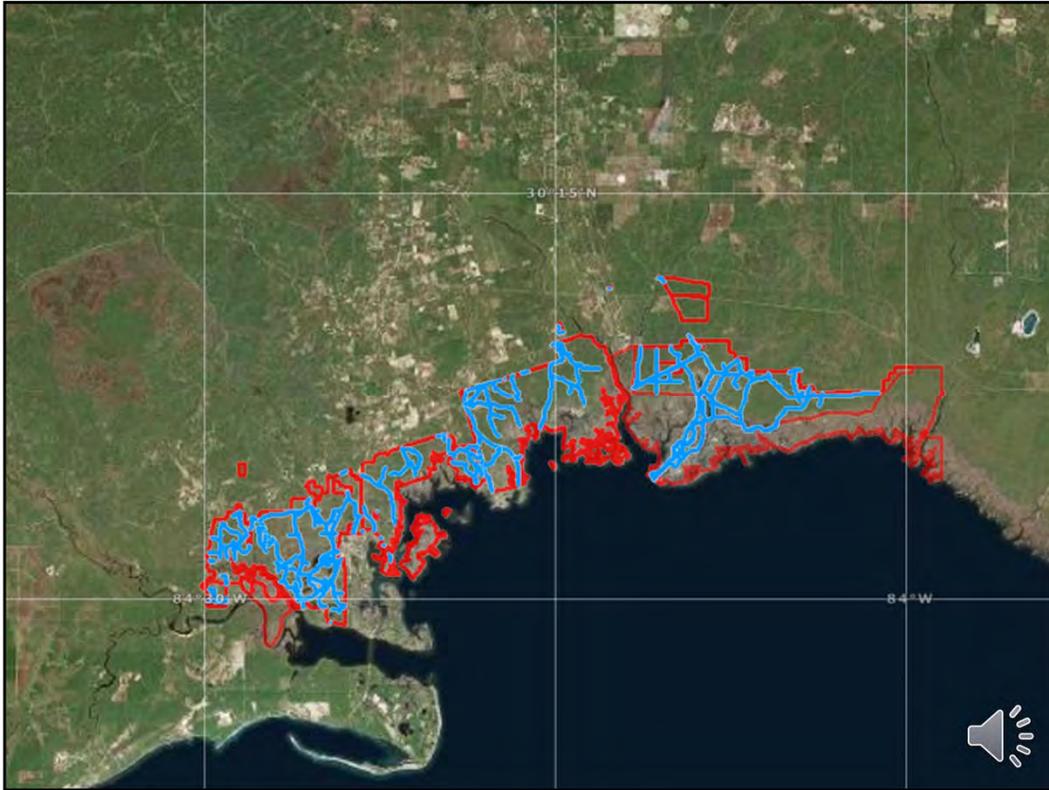




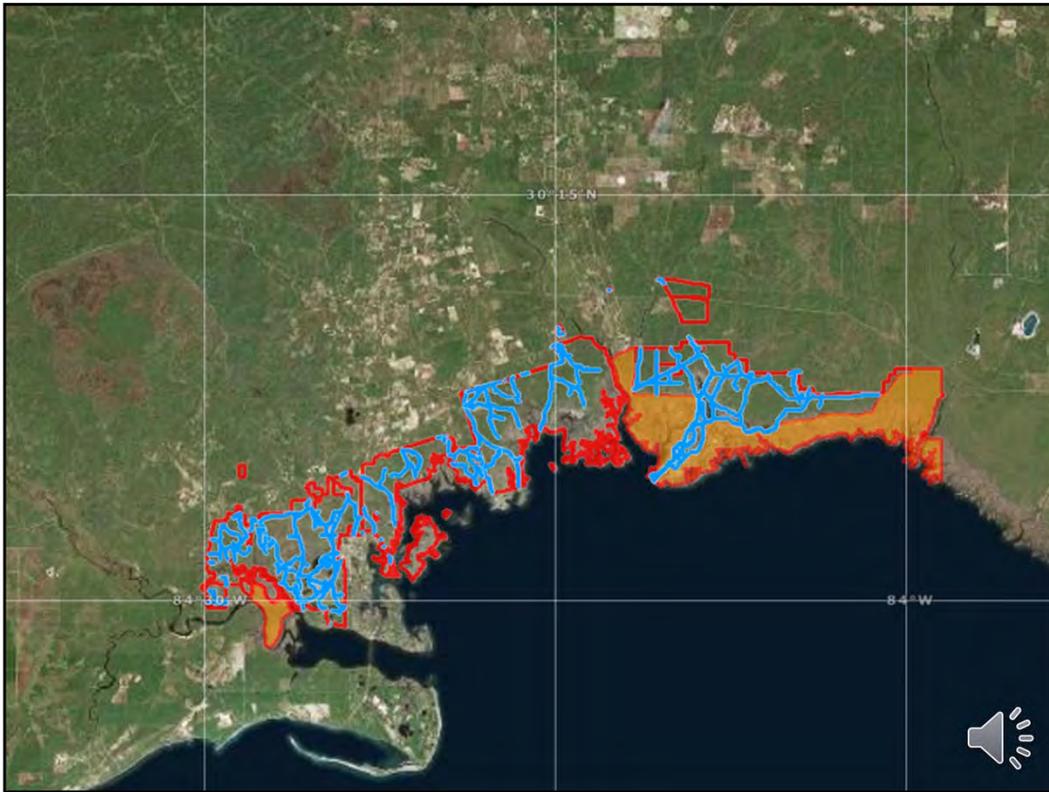
St. Marks NWR is located on Florida's Gulf Coast. It is home to many threatened species, including, Piping Plovers; Eastern Indigo Snakes; and Loggerhead Sea Turtles. It is also home to many endangered species, including, Red-cockaded Woodpeckers; Wood Storks; Florida Manatees; Green Sea Turtles; Kemp's Ridley Sea Turtles; and Leatherback Sea Turtles.



This image shows the refuge boundaries in red. Due to the FWS's concerns regarding roads within wilderness areas and because of the various threatened and endangered species that call St. Marks home, you would not think that there would be many roads within this refuge, much less, bisecting federally designated wilderness in the refuge.



But, St. Marks has no shortage roads. There are over 190 miles of roads within its borders. It has nearly 1.5 miles of road for every square mile of refuge.

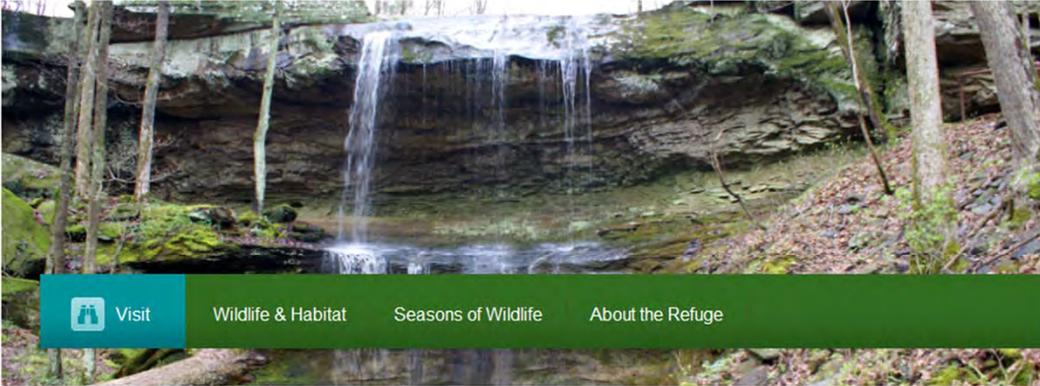


The refuge also has roads that bisect federally designated wilderness shown here in orange. Yet, St. Marks still manages to serve as critical habitat for many threatened and endangered species.

U.S. Fish & Wildlife Service

Crab Orchard  
National Wildlife Refuge | Illinois

A UNIT OF THE  
National Wildlife  
Refuge System



Visit Wildlife & Habitat Seasons of Wildlife About the Refuge

FEATURES



*Student Jobs*  
The refuge offers a variety of work experiences for students.  
*YCC Announcement 2015*

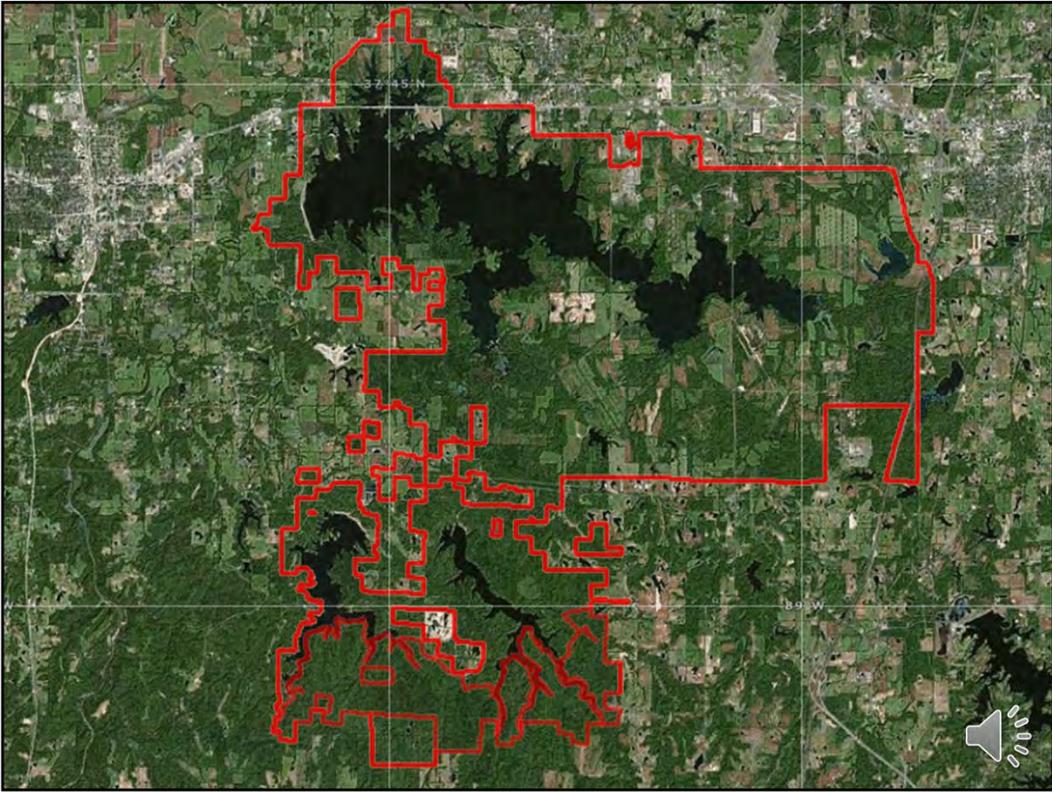
FOLLOW US ONLINE

MAPS

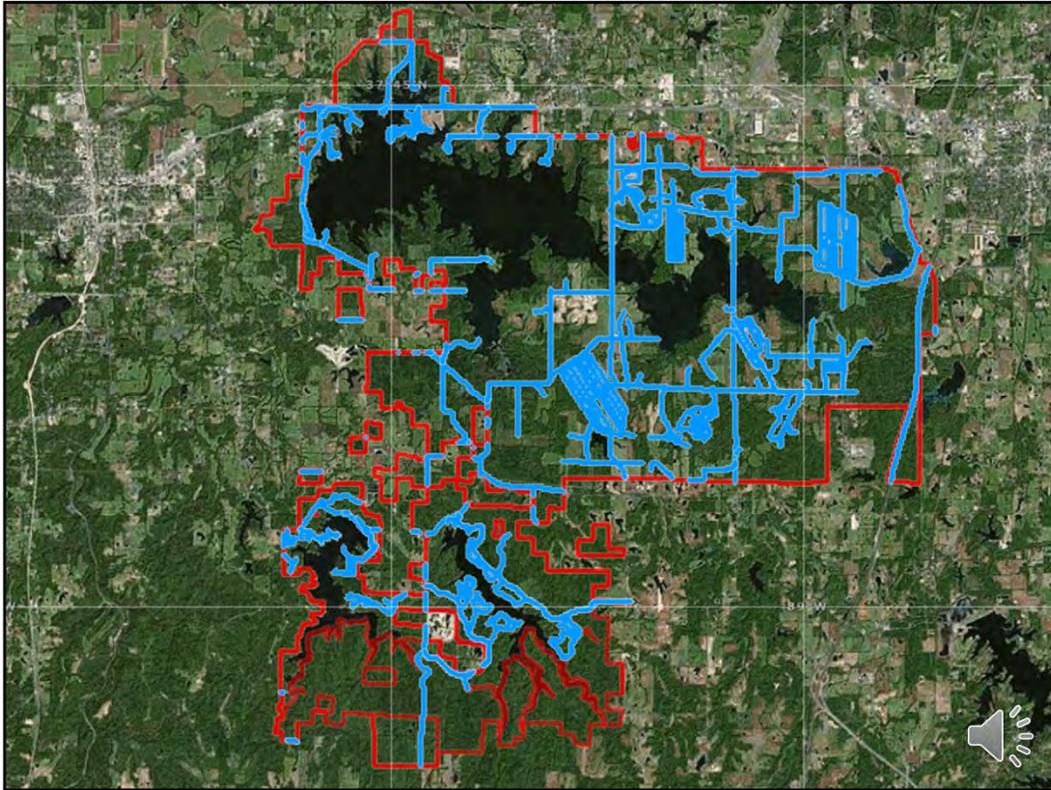
MULTIMEDIA

WHAT WE DO

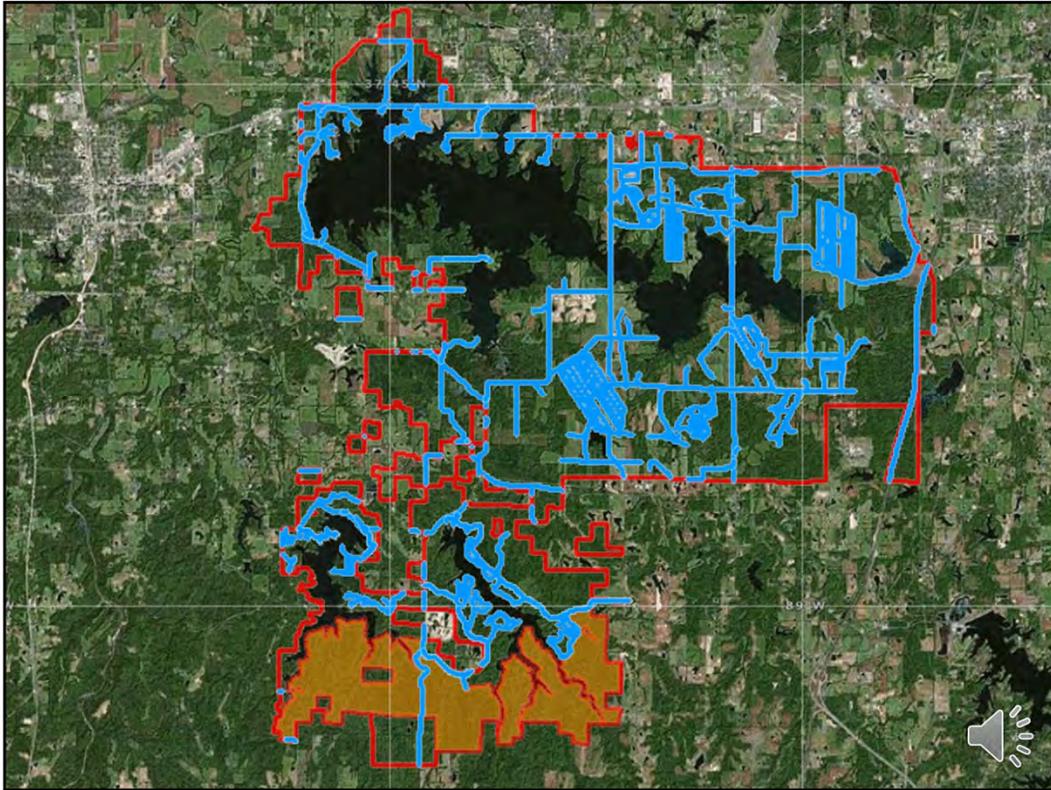
Crab Orchard NWR is in Illinois.



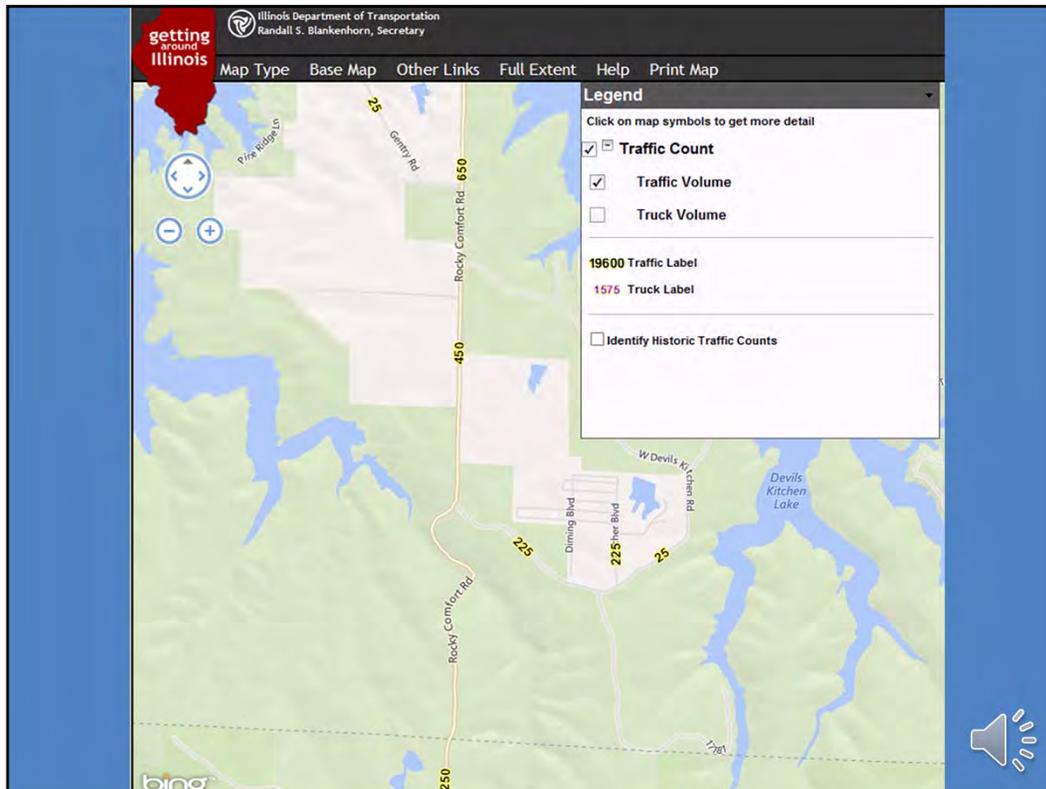
Here, the refuge is outlined in red.



This shows the refuge's over 190 miles of roads in blue. The refuge has over 2.6 miles of road for every square mile of refuge.



Here, you can see the refuge's wilderness area in orange, and a road known locally as Rocky Comfort Road bisecting the wilderness area.



As seen here, the State of Illinois Department of Transportation estimates that between 250 and 450 vehicles pass over Rocky Comfort Road each and every day in the location that the road bisects the refuge's wilderness area. That totals between 91,000 and 164,000 vehicles per year just through the wilderness area portion of the refuge alone.

U.S. Fish & Wildlife Service

Bosque del Apache  
National Wildlife Refuge | New Mexico

A UNIT OF THE  
National Wildlife  
Refuge System

Visit Wildlife & Habitat Seasons of Wildlife About the Refuge

FEATURES

**For Wildlife & You**  
The refuge uses many different tools to actively manage these lands for the benefit of wildlife, habitat and you.  
[Learn How](#)

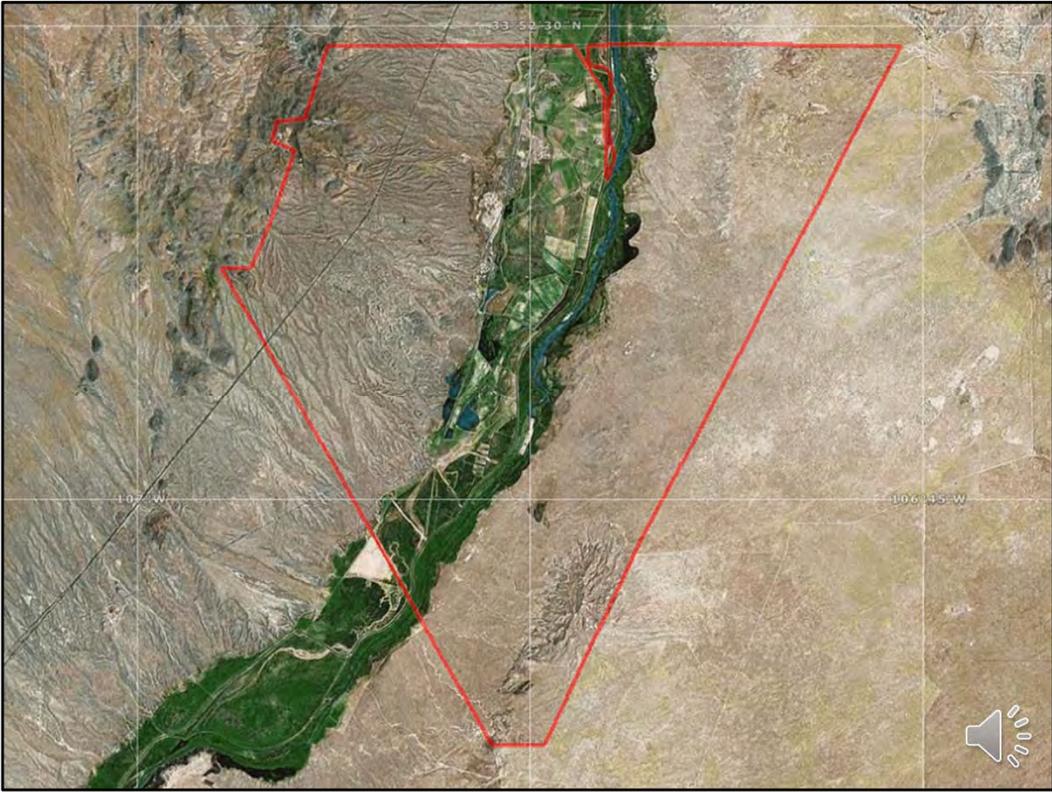
FOLLOW US ONLINE  
f t YouTube

MAPS

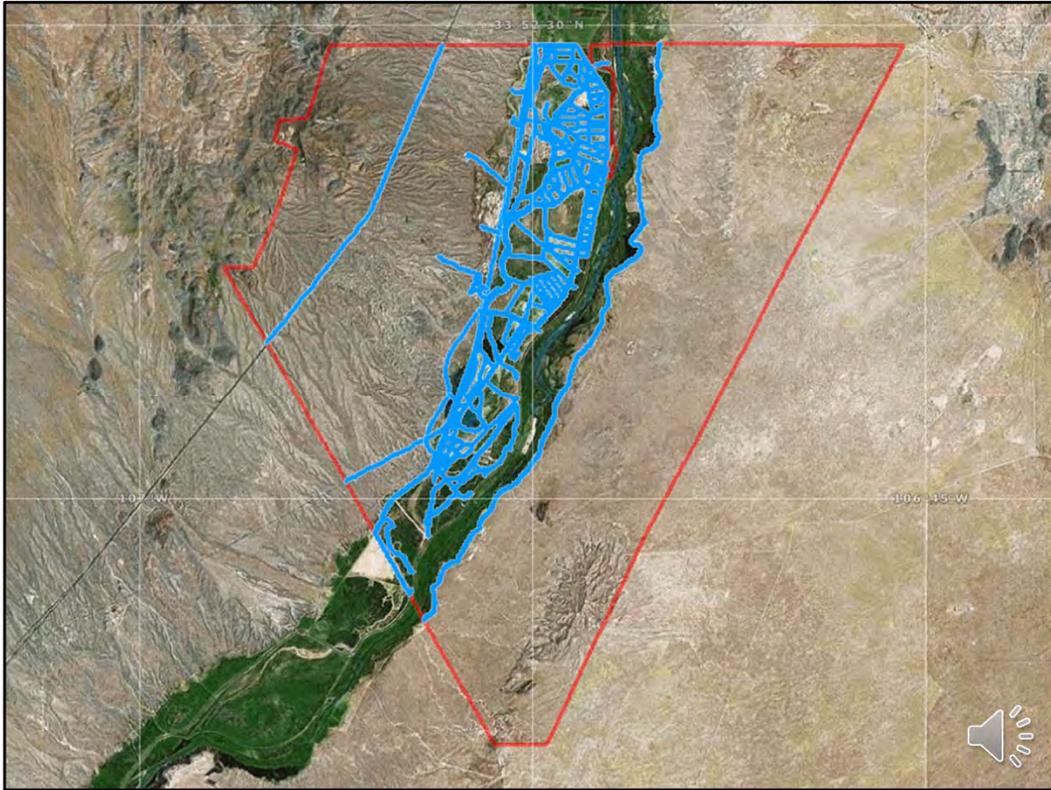
MULTIMEDIA

WHAT WE DO

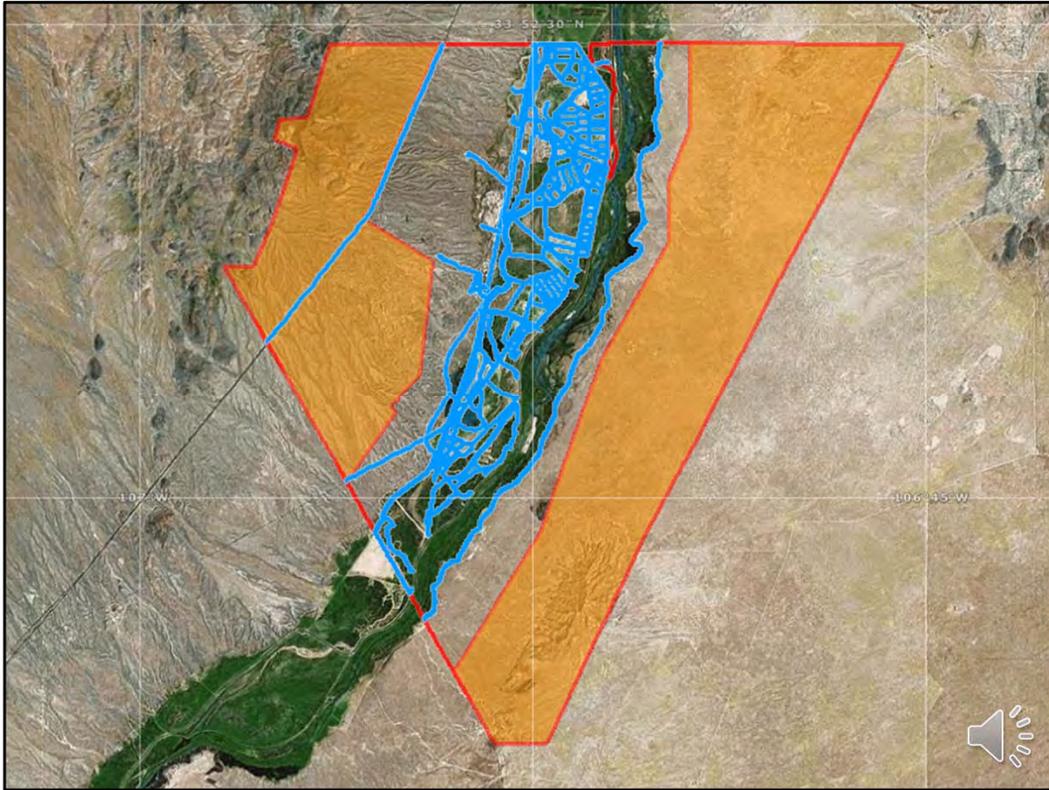
While there are no shortage of NWRs that contain wilderness areas with roads passing through, around or bisecting them, the last example that will be shown is Bosque del Apache NWR in New Mexico. It is an important waterfowl refuge and is home to a number of endangered species, including: Southwestern Willow Flycatchers, Whooping Cranes and Rio Grande Silvery Minnows.



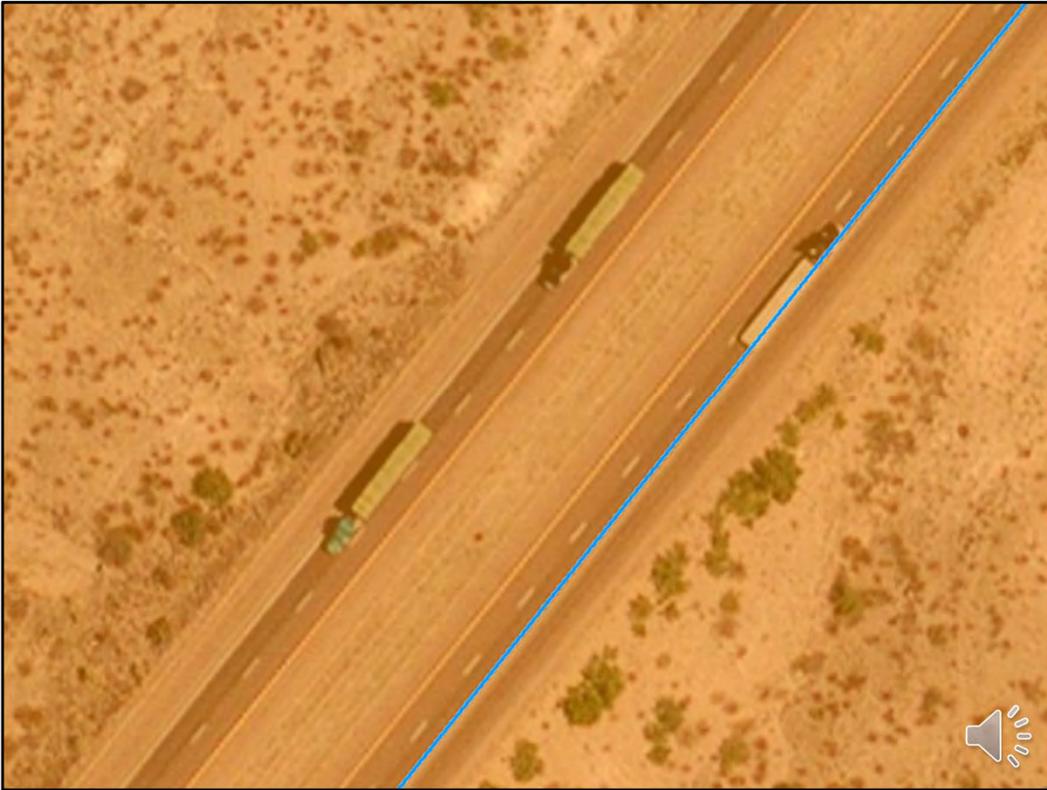
This is an image of the refuge outlined in red.



Here, the refuge's nearly 170 miles of roads are shown in blue. The refuge has nearly 2 miles of roads for every square mile of refuge.



Importantly, one of these roads even bisects federally designated wilderness within the refuge. And, this is no ordinary road.



Instead, as this enlargement from the previous GIS image shows, the road bisecting the refuge's wilderness area is none other than Interstate Highway 25, also known as US Highway 85.



And, as seen in this GoogleEarth Street View image from this same location, this interstate and wilderness area come complete with Walmart tractor trailers.



New Mexico Department of Transportation  
TIMS ROAD SEGMENTS BY POSTED ROUTE/POINT WITH AADT INFO  
I-ROUTES

As of: 5/27/2015

Route	Traffic Sec id	Begin Mont	End I Mont	D R	FCLS	County Name	AADT				Year	M H Terminus	%HC
							2014	2013	2012	Year			
I-25-P	18059	92.831	100.820	P	INTS	SIERRA	2,451	2,414	2,433	2012	L MITCHELL POINT INTERCHANGE	38	
I-25-M	18059	92.831	100.820	M			2,376	2,340	2,358	2012		38	
I-25-P	595	100.820	101.020	P			2,683	2,643	2,663	2012	L RED ROCK INTERCHANGE	39	
I-25-M	595	100.820	101.020	M			2,356	2,321	2,338	2012		39	
I-25-P	597	101.020	104.102	P			3,670	3,615	3,643	2012	L RED ROCK INTERCHANGE	34	
I-25-M	597	101.020	104.102	M			3,648	3,594	3,620	2012		34	
I-25-P	597	104.102	116.500	P		SOCORRO	3,670	3,615	3,643	2012	L SIERRA/SOCORRO COUNTY LINE	34	
I-25-M	597	104.102	116.500	M			3,648	3,594	3,620	2012		34	
I-25-P	619	116.500	116.572	P			2,542	2,504	2,604	2013	L NM107 MAGDALENA INTERCHANGE	34	
I-25-M	619	116.500	116.572	M			2,908	2,924	2,587	2013		34	
I-25-P	621	116.572	125.780	P			2,664	2,625	2,644	2012	L NM107 MAGDALENA INTERCHANGE	37	
I-25-M	621	116.572	125.780	M			2,472	2,436	2,454	2012		37	
I-25-P	639	125.780	125.881	P			2,845	2,802	2,843	2013	L NM178 SAN MARCIAL INTERCHANGE	30	
I-25-M	639	125.780	125.881	M			3,197	3,150	3,113	2013		30	
I-25-P	641	125.881	125.980	P			2,764	2,723	2,743	2010	L NM178 SAN MARCIAL INTERCHANGE	38	
I-25-M	641	125.881	125.980	M			2,851	2,808	2,829	2010		38	
I-25-P	643	125.980	140.577	P			3,394	3,245	3,269	2010	L NM178 SAN MARCIAL INTERCHANGE	39	
I-25-M	643	125.980	140.577	M			2,794	2,752	2,772	2010		39	
I-25-P	18537	140.577	140.610	P			4,338	4,244	2,860	2013	L US380 SAN ANTONIO INTERCHANGE	29	
I-25-M	18537	140.577	140.610	M			4,538	4,462	2,590	2013		29	
I-25-P	659	140.610	140.644	P			2,356	2,732	2,752	2014	C US380 SAN ANTONIO INTERCHANGE	34	
I-25-M	659	140.610	140.644	M			2,740	3,111	3,134	2014		34	
I-25-P	18539	140.644	147.903	P			4,440	4,374	4,406	2008	L US380 SAN ANTONIO INTERCHANGE	29	
I-25-M	18539	140.644	147.903	M			4,603	4,534	4,568	2008		29	
I-25-P	18539	147.903	149.179	P			4,440	4,374	4,406	2008	L	29	
I-25-M	18539	147.903	149.179	M			4,603	4,534	4,568	2008		29	
I-25-P	679	149.179	149.225	P			4,117	4,056	4,146	2010	L LOOP 001-2 SOCORRO SOUTH INTERCHANGE	27	
I-25-M	679	149.179	149.225	M			3,967	3,937	4,025	2010		27	
I-25-P	681	149.225	149.250	P			2,888	2,899	3,062	2013	L LOOP 001-2 SOCORRO SOUTH INTERCHANGE	30	
I-25-M	681	149.225	149.250	M			3,406	3,419	3,327	2013		30	
I-25-P	683	149.250	150.900	P			4,580	4,597	3,356	2013	L LOOP 001-2 SOCORRO SOUTH INTERCHANGE	22	
I-25-M	683	149.250	150.900	M			4,345	4,361	3,666	2013		22	
I-25-P	689	150.900	151.728	P			1,698	2,901	2,966	2014	C LOOP 001-2 SOCORRO NORTH INTERCHANGE	22	
I-25-M	689	150.900	151.728	M			1,375	2,614	2,672	2014		22	

Run Date: 5/27/2015

TIMS ROAD SEGMENTS BY POSTED ROUTE/POINT WITH AADT INFO

Page 9 of 36

The State of New Mexico estimates that this section of Interstate highway through this refuge's wilderness area, has between approximately 6,100 and 8,800 vehicles that pass over it each and every day. That is a staggering 2.2 to 3.2 million vehicles per year. Yet, the FWS cannot possibly allow the construction through Izembek of a short, low-speed, low volume, single-lane, gravel, life-saving road, completely disconnected from any highway system.



Some might say that the disparity between roads in Alaska NWRs and the lower 48 NWRs is justified.



They, such as Secretary Jewell pictured here in King Cove, would stress that there is a need to hold Alaska's refuges to a different standard. There is a need to place Alaska's refuges on a pedestal.



By saying this, these critics are suggesting that it is perfectly acceptable to treat some citizens of this Country radically different than others simply based on where, by happenstance, they were born or wish to continue to live. There is no justification for such a position. This is an image of King Cove, Alaska.

# “Connecting People With Nature”

FWS Employee Pocket Guide (FWS Fundamentals), July 16, 2013



“[It] is vitally interested in the maintenance of a public refuge road system which will provide access for the protection, use and enjoyment of National Wildlife Refuge System areas and which *will integrate with other transportation facilities.*”

Interagency Agreement Between FWS and FHWA Relating to Roads on the National Wildlife Refuge System, April 12, 1999



The agency has also indicated that. . . [read slide]

U.S. Fish & Wildlife Service

Sheldon  
National Wildlife Refuge | Nevada

A UNIT OF THE  
National Wildlife  
Refuge System

**About the Refuge**  
Established in 1931 to protect the imperiled American pronghorn, the Refuge is home to a variety of fish, wildlife, and plants found in this quiet remote corner of the Great Basin.  
[More about the Refuge...](#)

Visit Wildlife & Habitat About the Refuge

FEATURES

**Current Conditions**  
*Maintained roads through the refuge are in good condition and most secondary roads are drying after recent rains.*  
[Current Conditions](#)

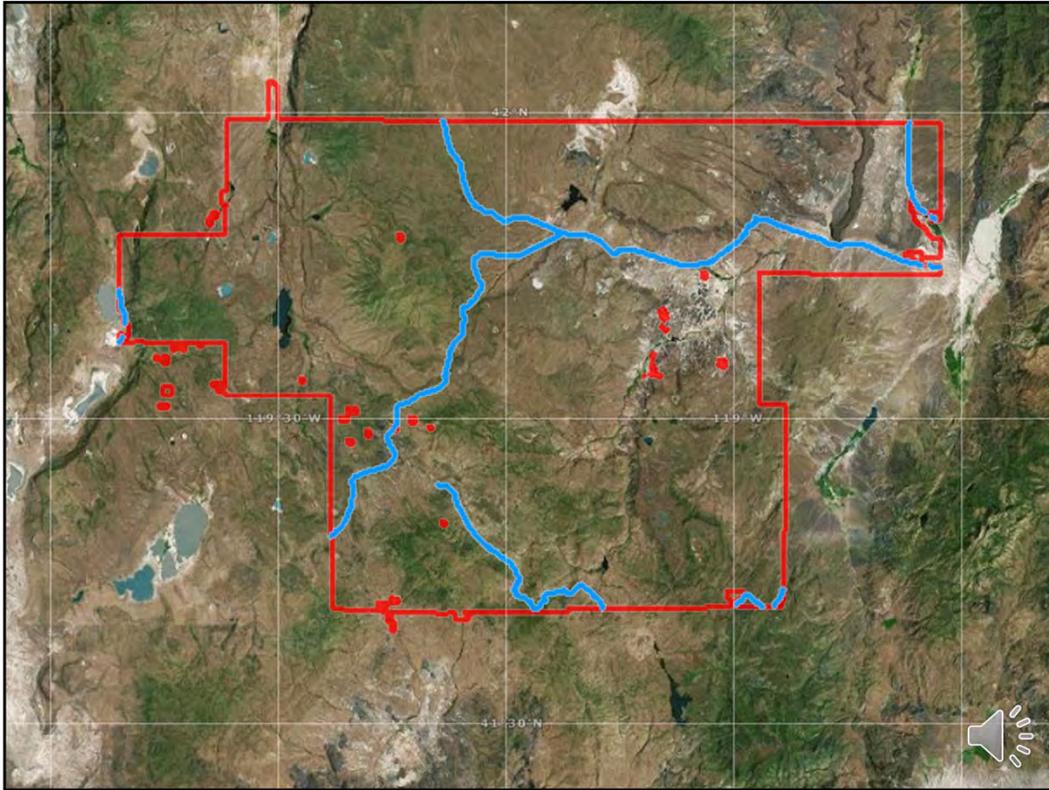
FOLLOW US ONLINE  
Facebook YouTube

MAPS

MULTIMEDIA

WHAT WE DO

The Sheldon NWR is located in Nevada. As seen in this image, the FWS posts updates regarding the current conditions on the refuge's many roads.



Here, the Refuge's roads are shown in blue. In 2012, the FWS justified creating, reopening, improving and realigning a number of different roads across the Refuge.

“Will best achieve the Refuge’s purposes and fulfill the Service’s mission, is consistent with the principles of sound wildlife management, and will facilitate priority public uses that are compatible with the purposes of the Refuge.”

Record of Decision, Sheldon National Wildlife Refuge,  
September 27, 2012



In its record of decision, the agency justified its actions, in part, because it: [read slide]

“Will provide an achievable balance of opportunities for priority and compatible public uses (hunting, fishing, guiding, research, rock collecting, wildlife observation, photography, environmental education, and interpretation), while providing sufficient protection for wildlife and their habitats.”

Record of Decision, Sheldon National Wildlife Refuge,  
September 27, 2012



The agency also indicated that the road project . . . [read slide]

In other words, the agency was adhering to one of its priorities of trying to connect people with nature and to use transportation systems in order to do so.

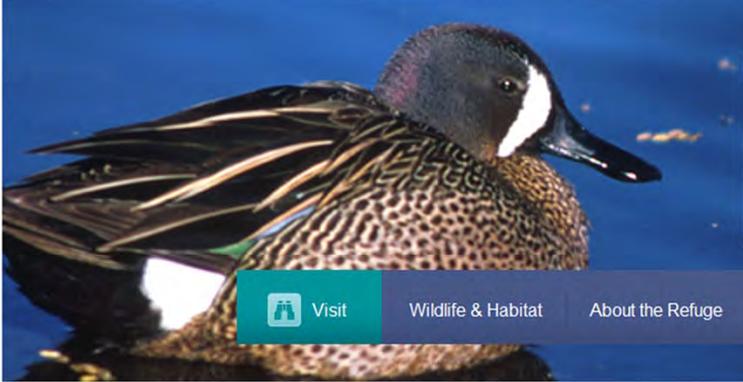
Also in the record of decision was reference to the fact that the agency was going to need to realign boundaries of a Wilderness Study Area in order to facilitate construction of the new roads.

U.S. Fish & Wildlife Service

Willapa  
National Wildlife Refuge | Washington

A UNIT OF THE  
National Wildlife  
Refuge System

Search All Refuges



**About the Refuge**  
Plants and animals from land, rivers and ocean are all present at Willapa National Wildlife Refuge – and are all dependent on the delicate balance of the estuary.  
[Discover more...](#)

Visit Wildlife & Habitat About the Refuge

FEATURES



**Homeward Bound**  
*Willapa is for the birds! Check the skies and shorelines for migrating birds - including shorebirds, waterfowl, raptors and songbirds.*  
[Uncover refuge wildlife watching hotspots](#)

ALERT - BURN BAN IN EFFECT

FOLLOW US ONLINE

MAPS

MULTIMEDIA

The Willapa NWR is located in Washington State. It is home to threatened Western Snowy Plovers and endangered Brown Pelicans.



In 2012, the FWS adopted a record of decision authorizing construction of a year-round boat launch and parking area in the Refuge.

“Will best achieve Refuge purposes, and contribute toward the mission of the National Wildlife Refuge System, consistent with the sound principles of fish and wildlife science and conservation, legal mandates, and Service policies.”

Willapa National Wildlife Refuge Final Comprehensive  
Conservation Plan and Record of Decision,  
August 12, 2011



In keeping with its stated priority of attempting to connect people with nature, the agency suggested that doing so: . . . [read slide]

U.S. Fish & Wildlife Service

Pea Island  
National Wildlife Refuge | North Carolina

A UNIT OF THE  
National Wildlife  
Refuge System

*About the Refuge*  
Saving places for wildlife... and people, too!  
... over 350 bird species.

Visit Wildlife & Habitat Seasons of Wildlife About the Refuge

FEATURES

**Gateway to eastern NC Refuges**  
The National Wildlife Refuges Visitor Center on Roanoke Island is open daily, year-round, is FREE, and offers the experience of a lifetime!  
*National Wildlife Refuges Visitor Center*

ALERT

FOLLOW US ONLINE

MAPS

MULTIMEDIA

Pea Island NWR is located on the outer coast of North Carolina. It is home to threatened species such as Piping Plovers and Loggerhead Sea Turtles. It is also home to endangered Green Sea Turtles. There are over 350 species of birds that can be found at the refuge at various times of the year.



In 2010, a record of decision was issued authorizing construction of a large, 2.5 mile long highway bridge partially within the Refuge in this location.



This is a Google Earth Streetview image of that same location looking north on North Carolina Highway 12, just as it is leaving Pea Island NWR. Unlike the road needed across Izembek, the road connecting to the Bridge in Pea Island NWR is a paved highway that North Carolina estimates has roughly 5,900 vehicles that pass over it each day.

“[D]etermined that there is no feasible and prudent alternative to the use of land from the Pea Island NWR for the construction of [the bridge].”

NCDOT and FHWA Record of Decision for NC 12  
Replacement of Herbert C. Bonner Bridge,  
December 2010



The record of decision for the project . . . [read slide]

Therefore, despite a perceived negative impact, approval for construction of a road through a NWR will be given when it is sufficiently necessary.



It is difficult to envision any greater necessity than what presently exists for the citizens of King Cove. This is an image of 63 year-old Irene Newman being medevaced from King Cove to Cold Bay on February 14, 2014, because of a life-threatening condition.



This is a short video-clip from that day. At the time, due to white-out conditions, visibility was nearly zero and the winds were gusting to 70 m.p.h. Ms. Newman was taken by Coast Guard helicopter the short distance to Cold Bay and its all-weather airport. Because planes can usually safely arrive and take-off at that airport, she was immediately flown to a hospital in Anchorage via Guardian Flight, a private jet medevac transporter. Unfortunately, harrowing, life-threatening scenes like this one are all too common in King Cove.



Over the course of a week this past July, the Coast Guard performed three separate medevacs from the Community of King Cove, including two separate medevacs in one day. In this image, a Coast Guard helicopter is being forced to land in the parking lot of the old high-school because dense fog and low visibility prevented it from landing at the King Cove airstrip. In these three medevacs, the patients were all flown by helicopter to the all-weather airport in Cold Bay. From there, they were then taken by planes to Anchorage.



A total of 31 medevacs have now been carried out from King Cove since December 23, 2013 – the day Interior Secretary Jewell rejected the land exchange which would have allowed construction of a road through Izembek. Ten of those medevacs have required the assistance of the U.S. Coast Guard, even though such service is not part of the Coast Guard’s core mission. These missions also come at a very high cost to taxpayers and force flight crews to risk their own lives in terrible weather conditions.



Over the past 30 years, 19 deaths in King Cove have been attributed to the lack of a road. This is either because of plane crashes or residents' inability to reach medical treatment in time.



King Cove's airstrip, shown here, is not for the faint of heart. Due to high winds and the narrow valley in which it is located, it can be particularly hazardous as these passengers experienced in April, 2010. The airstrip is closed by bad weather more than 100 days a year on average. Even when it is open, nearly 40 percent of the flights not canceled, are interrupted or delayed by wind and turbulence, fog, rain, or snow squalls.



By contrast, the Cold Bay airport is only closed an average of 10 days a year.



The additional loss of life in King Cove due to the lack of a road is inevitable. How many more deaths will be deemed acceptable before a road is allowed to be built?



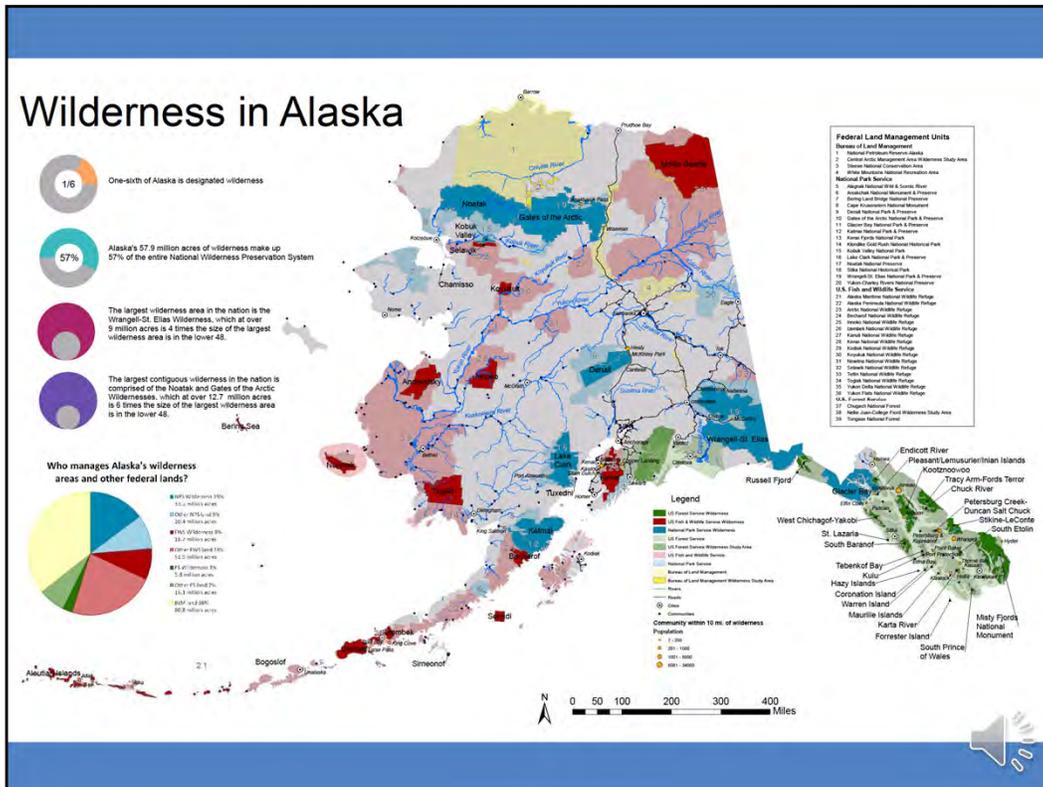
Even if the 10 needed miles of road were constructed in Izembek, it would only increase the refuge's road density by 2 one hundreds. In other words, it would go from a density of just slightly greater than 5 one hundreds of a mile of road for every square mile of refuge to just 7 one hundreds of a mile of road. As this image of interior Alaska suggests, that is hardly significant. This is particularly so when compared with the road densities of the many successful and important refuges in the lower 48.



The existing road would merely go from looking like this. . .

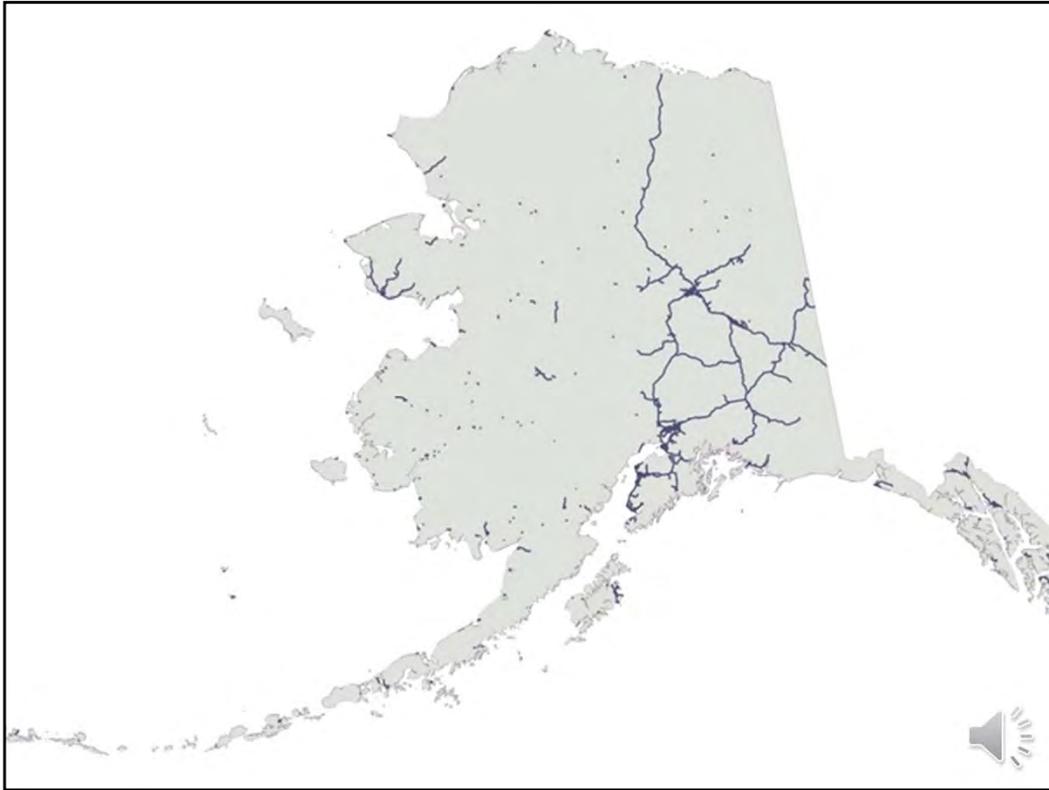


To this.

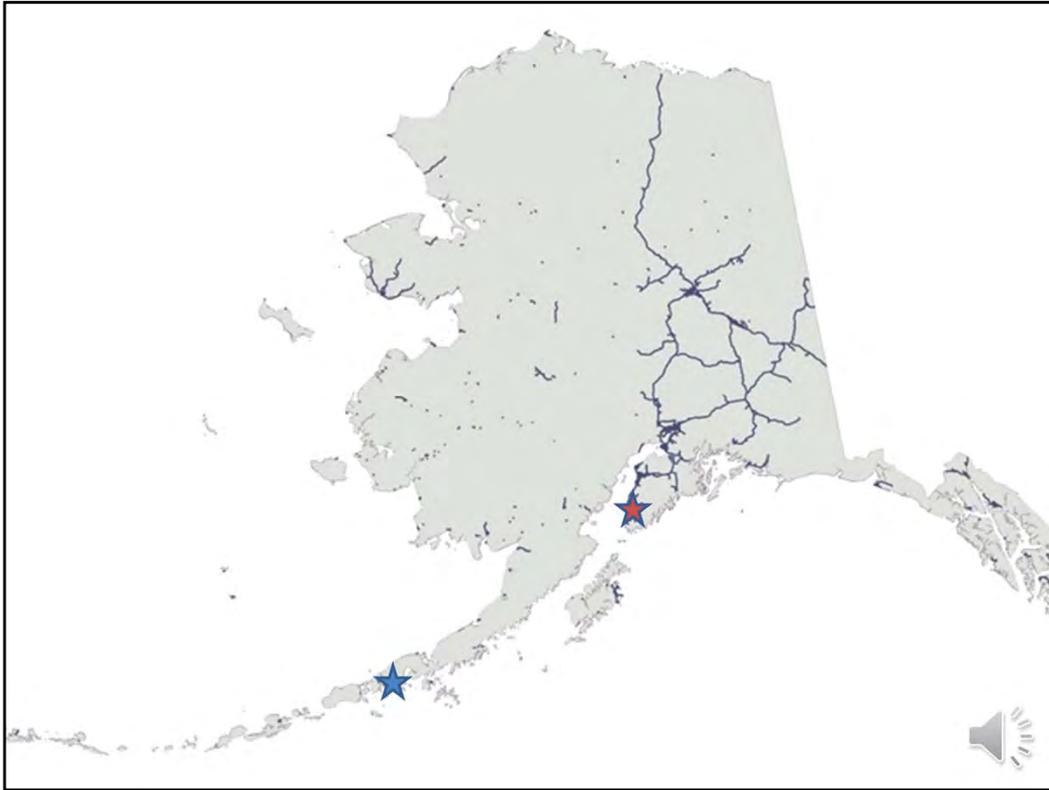


Congress recognized Alaska’s limited roads and infrastructure when it passed the Alaska National Interest Lands Conservation Act or ANILCA, which created over 100 million acres of conservation system units across the state, including the Izembek National Wildlife Refuge and Wilderness.

The Act devotes an entire title to addressing the significant access needs of the State and its citizens. In fact, ANILCA Title XI begins with Congress’ finding that “Alaska’s transportation and utility network is largely undeveloped...” In short, ANILCA Title XI mandates that very different rules apply when addressing transportation needs within or across Alaska’s conservation system units, including wilderness. While the ROD for the Izembek Land Exchange focuses on the Refuge’s conservation purposes, it makes no mention of other balancing provisions within ANILCA. Nor does it recognize that ANILCA provided a balance for both national conservation interests and the economic and social needs of the State of Alaska and its people.



To this day, the State's highway system remains very limited. As seen in this image, the black lines represent the State highway system. Very few of the conservation system units created by ANILCA contain any constructed roads, nor, as with Izembek, are they located anywhere near the contiguous portions of the State's highway system.



King Cove is located near the end of the Alaska Peninsula, over 500 miles away from Homer, Alaska, the nearest point connected to the Alaska Highway System. The location of King Cove is represented by the blue star and the location of Homer is shown with the red star. There are no roads linking King Cove to the Alaska Highway System. Anyone in the lower 48 can get into their cars and drive to any of the other refuges represented in this PowerPoint. However, even if a road did exist across Izembek, nobody other than people living in King Cove and Cold Bay will, as a practical matter, be able to use the road.



Nobody is suggesting that Alaska should emulate conditions found within NWRs in the lower 48, including their density of roads. Alaska is special and unique. Alaskans and the Nation are fortunate that Alaska is as pristine and untrammled as it is. While we recognize the value of Alaska's refuges and wilderness areas, the reality is that given their size and expanse, the few short miles of single lane life-saving road needed here is of no significance compared to existing roads in lower '48 refuges.



Unlike many of the roads and highways within refuges elsewhere, this road will always be a single lane, low-speed, low-volume gravel road, completely disconnected from any highway system by over 500 miles. The total number of vehicles that could even potentially use it, much less, would actually use it, is less than 300. Even if every one of those vehicles traveled the road every single day, the road would still have a far, far lower level of use and impact than roads on refuges elsewhere.

Please urge Secretary Jewell to immediately allow construction of this much needed life-saving road.