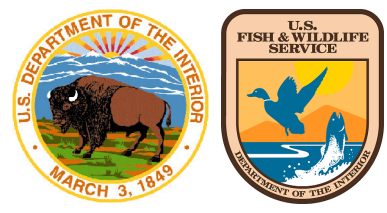


From: [Grizzle, Betty](#)
To: [Shoemaker, Justin](#)
Subject: Two more maps
Date: Tuesday, February 7, 2017 10:35:07 AM
Attachments: [Wolverine D Inman Primary Habitat USFS.pdf](#)
[Wolverine D USFS Prior Range.pdf](#)

These show the USFS NRIS data (i.e., more credible wolverine reports), rather than all of the observations we collected.

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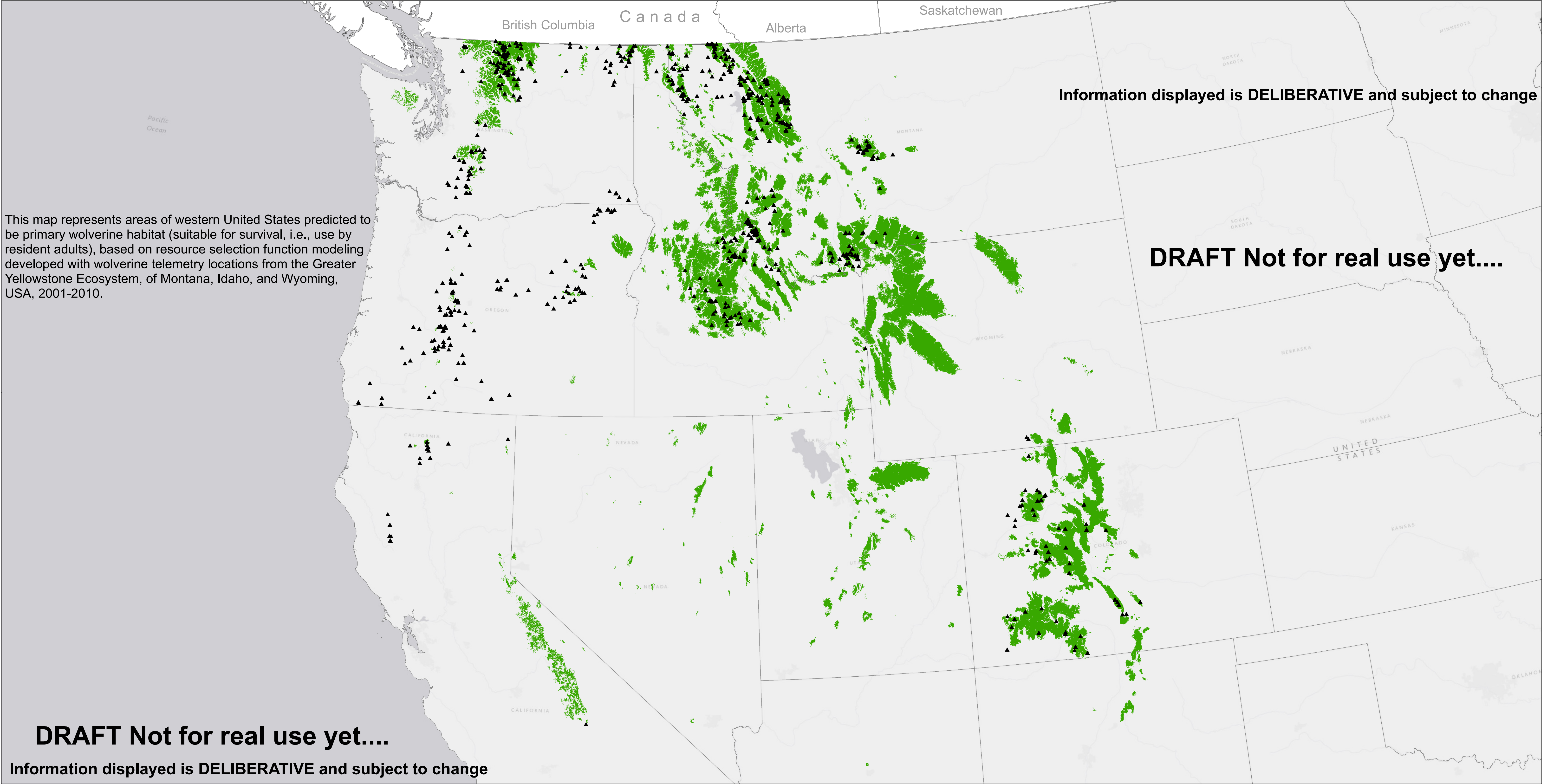
Betty J. Grizzle, D.Env.
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Carlsbad Fish and Wildlife Office
2177 Salk Ave, Suite 250
Carlsbad, CA 92008
760-431-9440, ext. 215
760-431-5901 fax



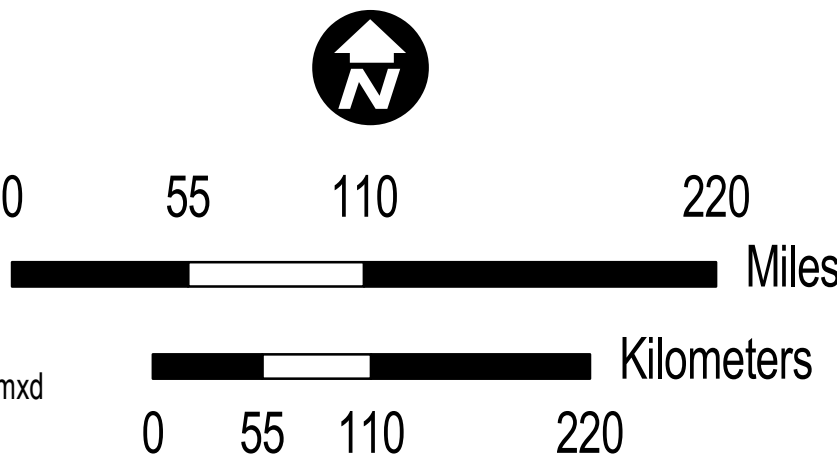
U.S. Fish & Wildlife Service

Carlsbad Fish and Wildlife Office
2177 Salk Ave. Suite 250, Carlsbad, California 92008

Wolverine Primary Habitat in the Western United States with USFS Data



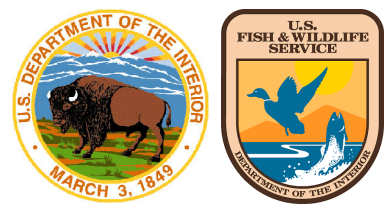
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CARLSBAD FIELD OFFICE
GIS CONTACT: ED TURNER
BIOLOGY CONTACT: BETTY GRIZZLE
(760) 431-9440
DATA SOURCE: USFWS, INMAN (WCS), COPELAND
IMAGE SOURCE: ESRI Online Mapper
Feb 07, 2017
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Legend

- ▲ Wolverine Observations
USFS NRIS Data
- Primary Habitat

Map is a reproduction of Figure 4., from Robert Inman's
Doctoral Thesis No. 2013:4,
Wolverine Ecology and Conservation in
the Western United States

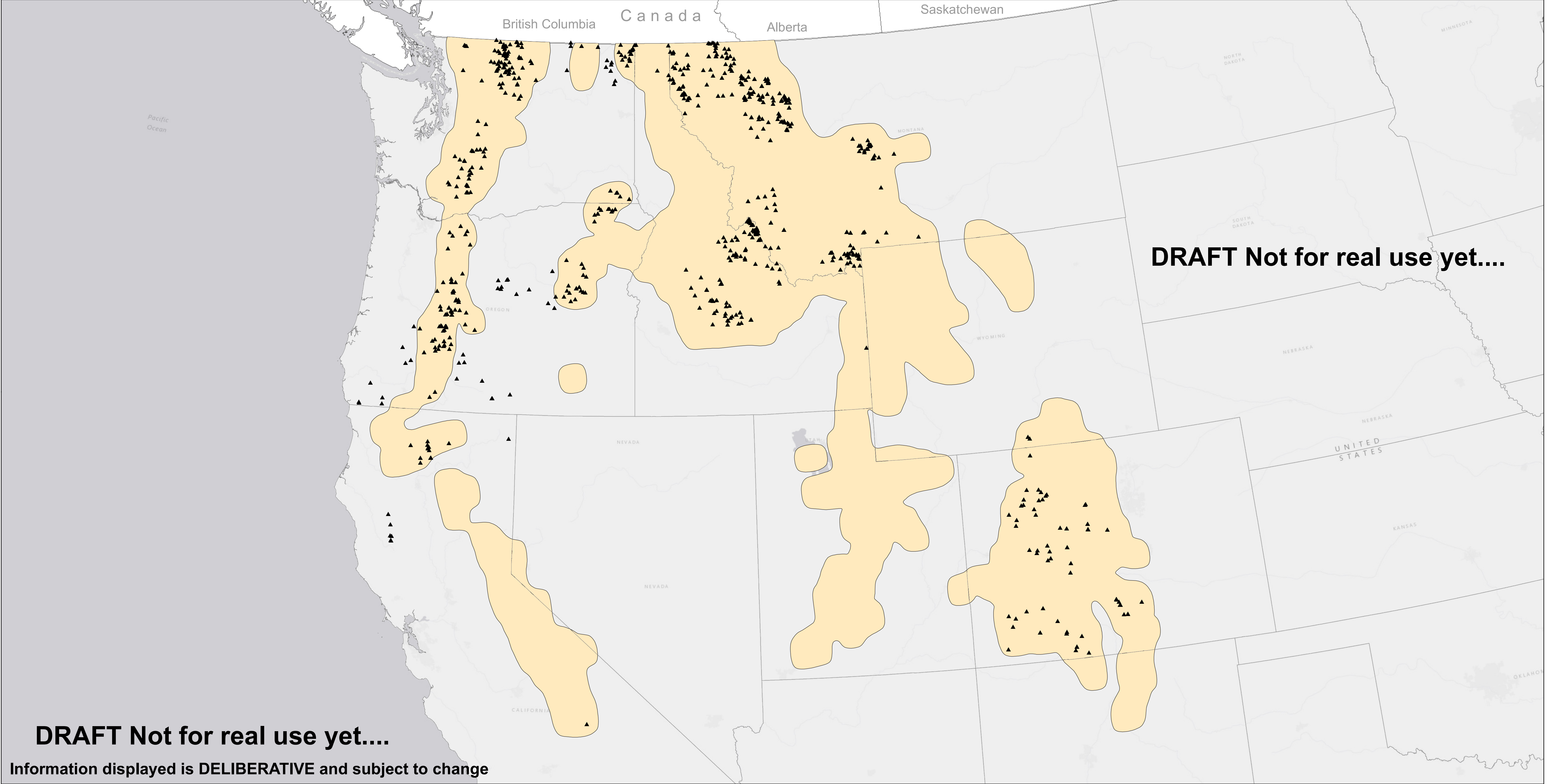


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Information displayed is DELIBERATIVE and subject to change

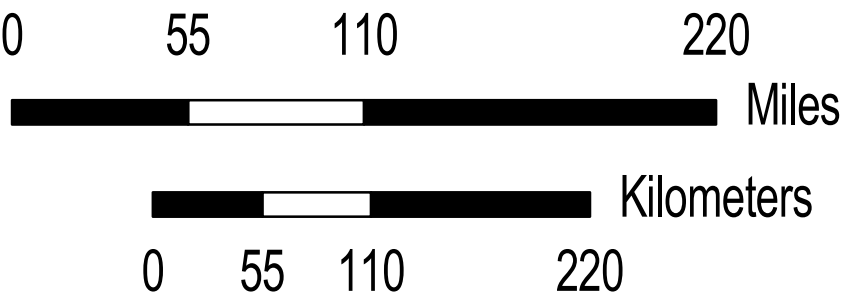
Wolverine USFS Data and Prior Geographic Range Map



DRAFT Not for real use yet....

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IMAGE SOURCE: ESRI Online Mapper
Feb 07, 2017
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Wolverine Observations
USFS NRIS Data



Prior Geographic Range - Map represents areas that were considered the Geographic Range created prior by Nick Hardy and Shawn Sartious, USFWS, using the Snow model, PH model, FD model limiting areas to >100km² and finally buffered to 20km.

Legend