

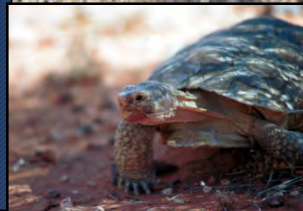
Species Range Refinements

NMFS/ EPA / FWS

4/15/2015

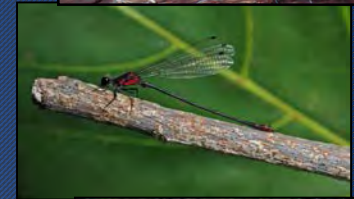
Species Range Refinements

- NMFS' species range data have been provided to EPA (~100 spp.)
- FWS using a phased approach to refine and deliver range data (>1,600 species)

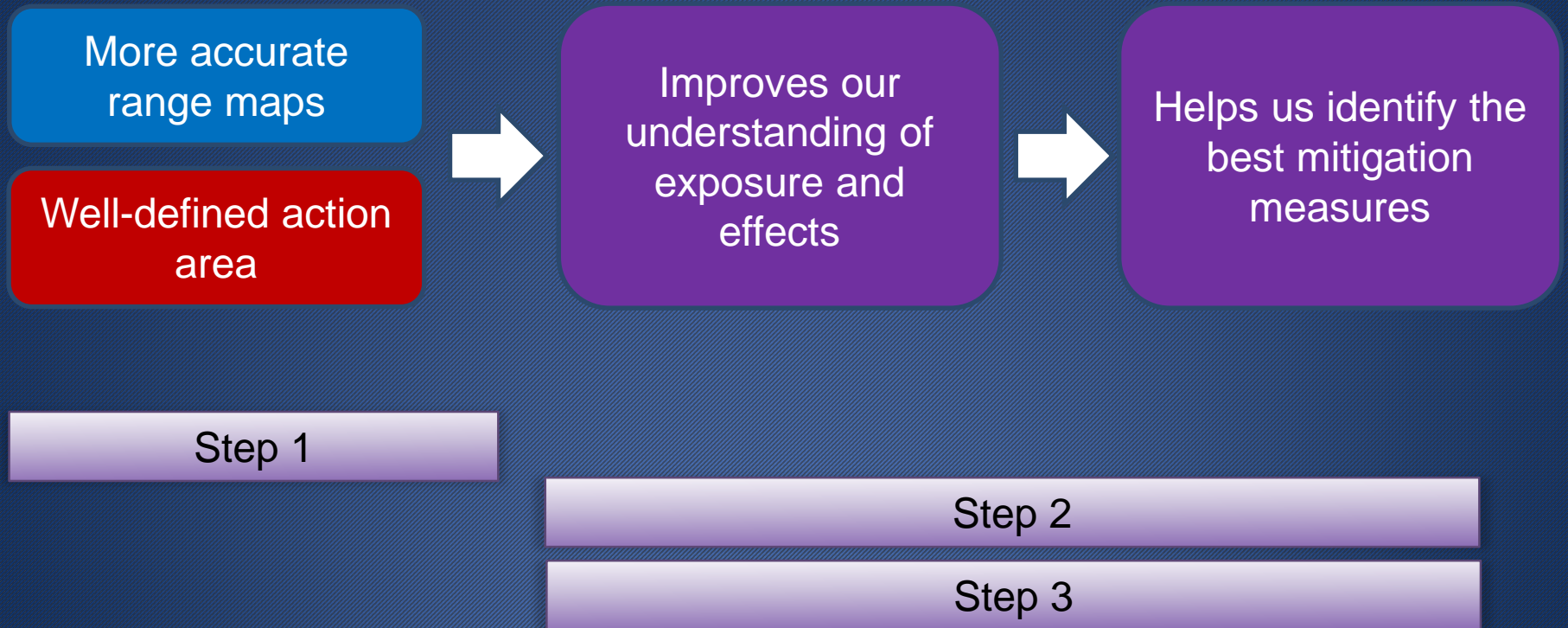


Species Range Refinements

- Goal is to obtain species range data at the most relevant level (county, or sub-county, as appropriate) for use in initial ESA assessments
- FIFRA Endangered Species Task Force (“FESTF”) has assisted FWS in the development of the maps



Refined Information



Progress so far

Phase 1: Nearing completion

- Includes aquatic species (e.g., fish, amphibians, mussels), invertebrates, and birds

Phase 2: Field Offices currently reviewing and revising species range maps

- Includes plants, mammals, and reptiles

Phase 3: In process

- Includes Hawaiian and Pacific Island species

Challenges so far...

- **Different levels of detail:**
 - Species ranges often span more than one field office's service area
 - Maps from various field offices are being combined to represent the entire range
 - The scale of maps varies greatly, from very refined (points or line data) to quarter quads, quads, geographically mapped areas to county level
 - Approach to develop ranges also varies

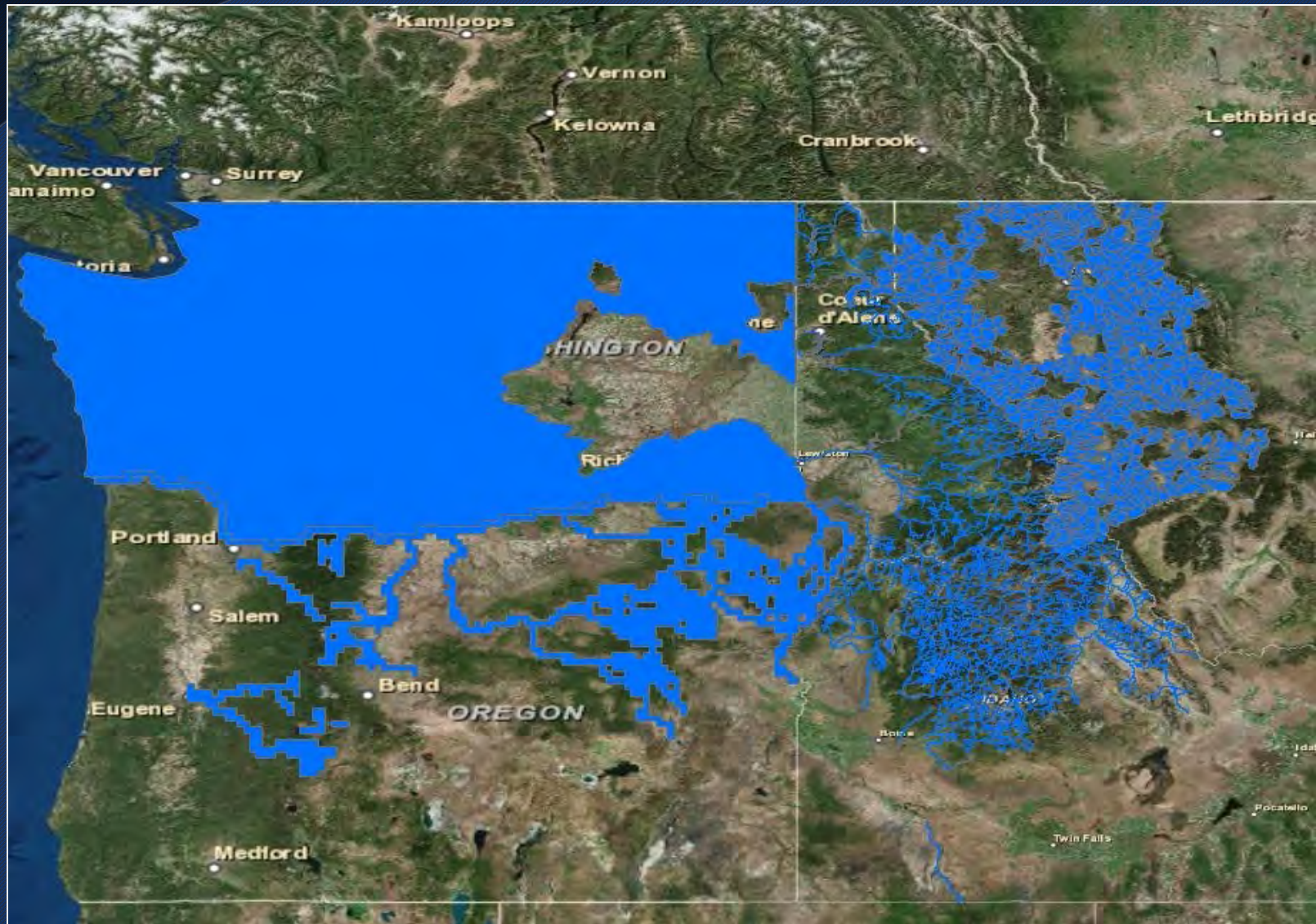
Challenges so far...

- **Refinement of range information**
 - For phase 1, a majority of offices have provided more refined maps than county-level, although many of these maps could potentially be refined further.
 - For example, many fish maps that have been provided are represented by HUCs, quads or quarter quads. We are refining these.
 - We'll continue to further refine maps as appropriate.

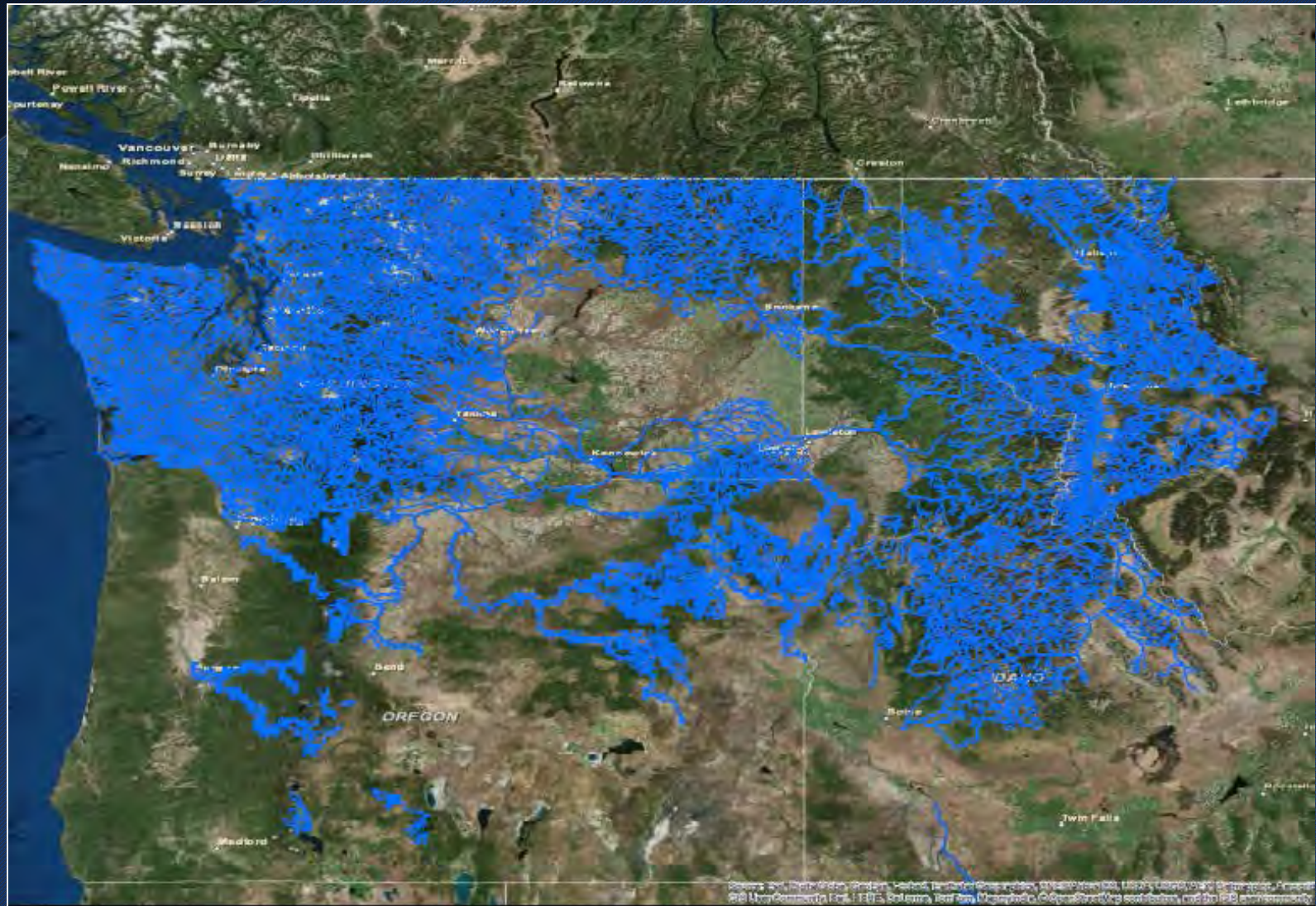
Challenges so far...

- **Review Time**
 - Time intensive process - Since many species are found in more than one field office's service area, we had over 1,600 individual maps that had to be collated for Phase 1 (465 species)

Bull Trout Range – Initial Map



Bull Trout Range – Refined



Questions?