

Wolf-Livestock Compensation



4 May 2026



Prong 3: Pay for Presence



4 May 2026

Pilot P4P - Framework



Compensation of potential indirect losses based on the documented presence of known wolf packs:

- Temporal – grazing period (winter and summer)
 - Wolf locations from **May 16 – Oct. 15** and **Oct. 16 – May 15**
- Spatial – pack core area vs. broader pack territory
- KDE or MCPs “Known pack areas”
- Categorical – species and age class of livestock
 - 2 to 3.5% of FMV for each qualifying head of livestock (depending on age class/species)

Pilot P4P - Framework



Eligibility:

- “Producers raising livestock within any portion of the known territory of a resident wolf pack...”
- “...animals that spend at least 3 months within a pack’s summer and/or winter territory”
- “...extenuating circumstances where eligibility may be considered on a case-by-case basis.”



Pilot P4P - Framework

Quantifying Wolf Presence – Known Packs

- If collar(s) is present – Kernel Density Estimates (KDE) used
 - 95% KDE for ‘pack territory’
 - 50% KDE for ‘core area’
- If no collars present – Minimum Convex Polygon (MCP)
 - MCP of all confirmed presence for each grazing period

Pilot P4P - Framework



Payment Formula:

Age/Species	Pack Territory	Core Area
Per Eligible Calf	2.0% of FMV	3.5% of FMV
Per Eligible Cow	2.3% of FMV	3.0% of FMV
Per Eligible Ewe		2.3% of FMV

Pilot P4P – Payment Formula

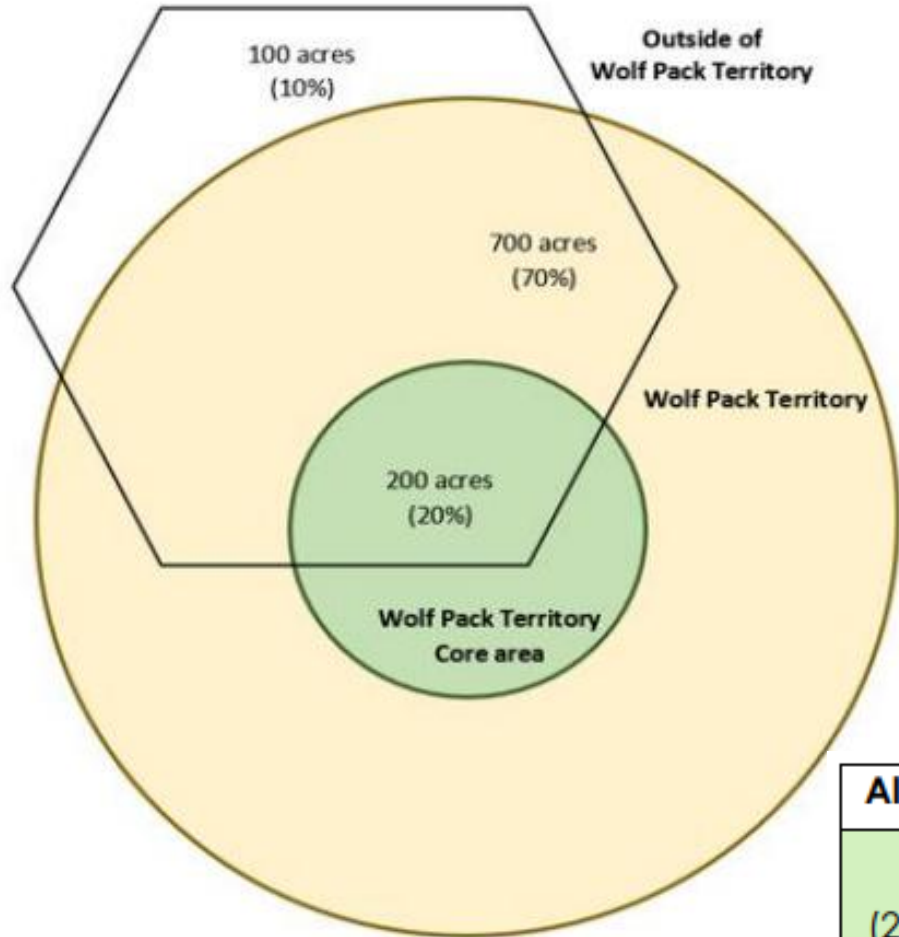
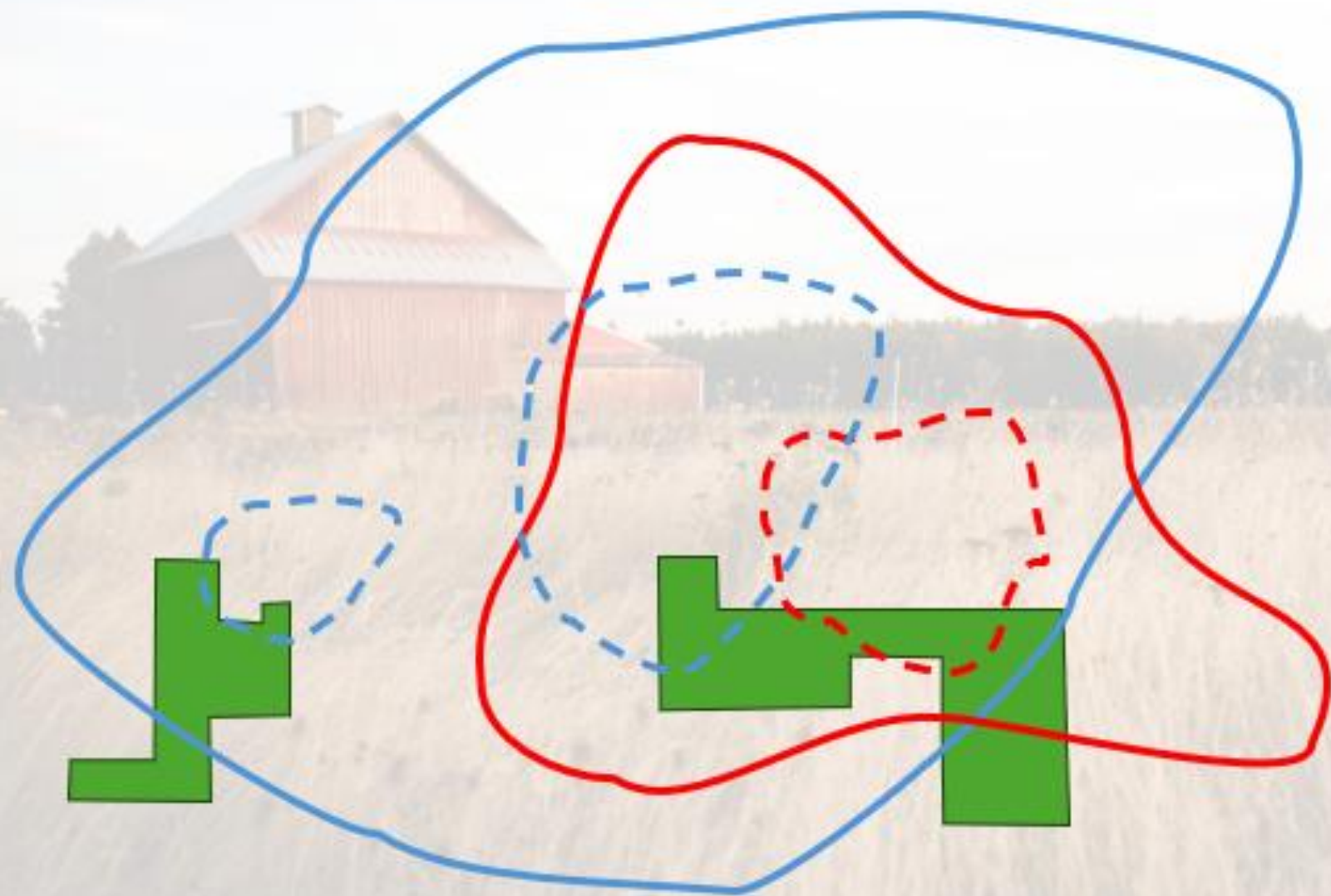


Figure 1 and Table 1 from Pilot Program framework document



Allotment location	Payment formula	Calculation
Core Area (20% of allotment)	500 cows x FMV (e.g., \$1 100/cow) x 3.0% x 0.20	\$3,300 (Cows)
	500 calves x FMV (e.g., \$1 400/calf) x 3.5% x 0.20	\$4,900 (Calves)
Wolf Pack Territory (70% of allotment)	500 cows x FMV (e.g., \$1 100/cow) x 2.0% x 0.70	\$7,700 (Cows)
	500 calves x FMV (e.g., \$1 400/calf) x 2.0% x 0.70	\$9,800 (Calves)
	Compensation Total	\$25,700

Realistic Example



- Winter Territory 95% KDE
- - - Winter Core 50% KDE
- Summer Territory 95% KDE
- - - Summer Core 50% KDE
- Applicant's grazing grounds

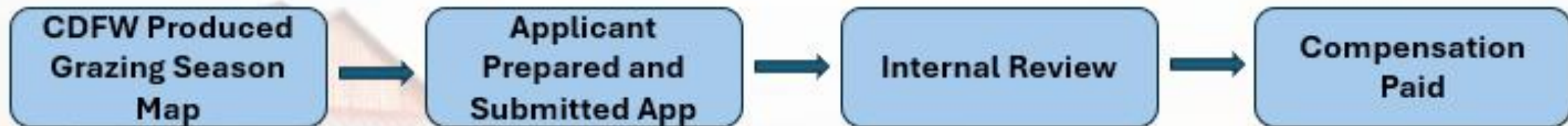
Pilot P4P – Application Package



Minimum Required Documents:

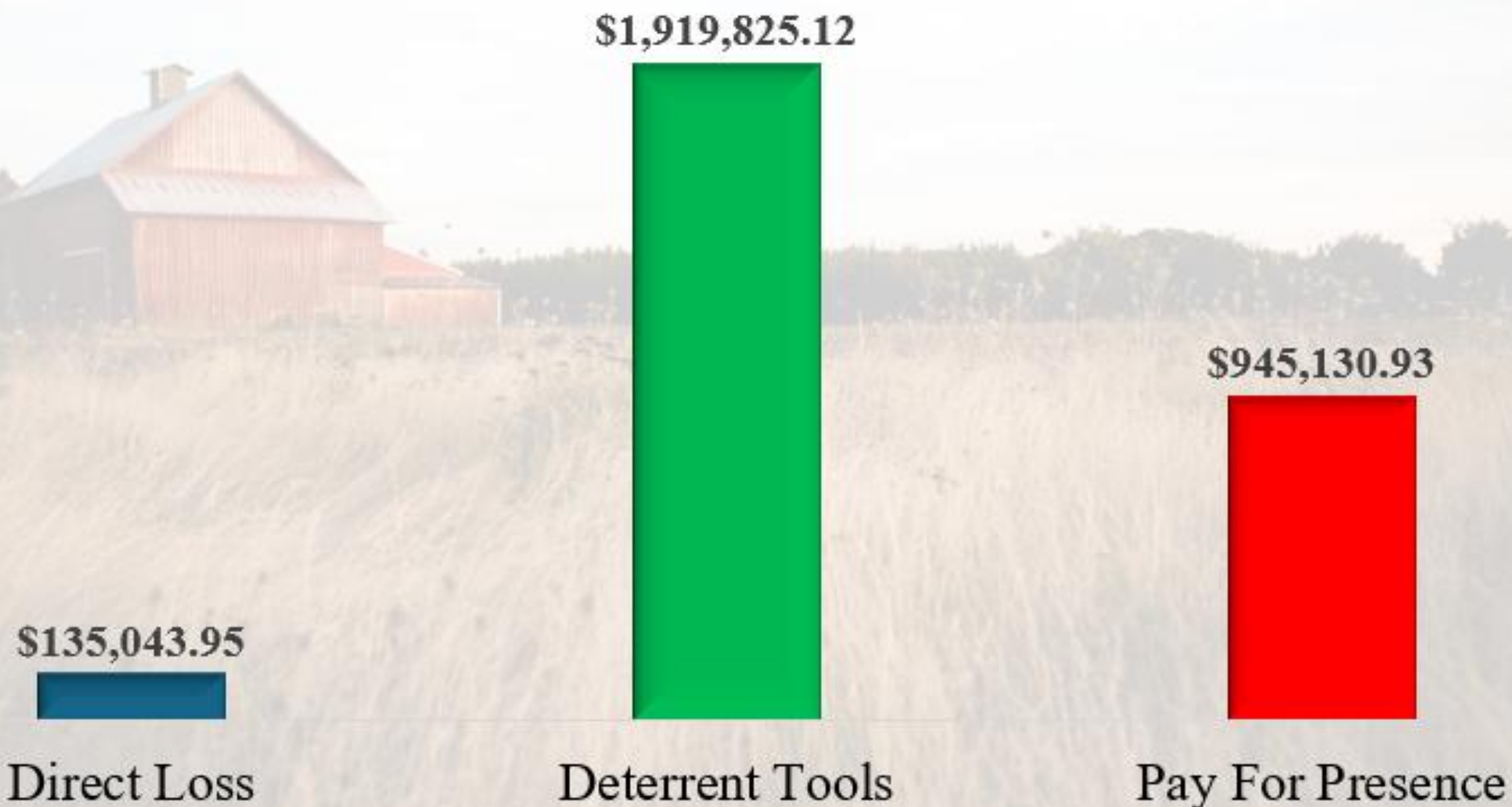
- Location(s) of each grazing allotment
- Brief description of operation
- Dates livestock are at location
- Type of livestock on each allotment/pasture
- Total head of livestock at start of season
- Proof of FMV or other valuation method
- Description of nonlethal deterrent methods currently used

Pilot P4P - Process



- Wolf staff collate collar and ground data to create maps of pack territories and core area for the season
- Applicant compiled necessary application material and documentation
- Application package submitted to CDFW
- Staff from HQ and regions reviewed application package
- Determined eligibility
- Worked with applicant to digitalize grazing area boundary
- Calculated P4P Compensation
- Similar process as what was presented for Direct Loss
- Invoice creation & document processing were similar to other prongs

Pilot Program: 2022-2024





Pilot P3 – Internal Concerns

- Most agency resource-heavy prong
 - Administrative & field
- Relatively straightforward when GPS collar data is available
 - % of packs with collars likely to be minority going forward
- Use of MCP's risks exaggerated edibility
- Overall cost of the prong – potentially the highest costing prong per year/pack



Indirect Loss – Topics of Discussion

1. Other ways to compensate indirect loss
2. How to quantify wolf presence

Other Examples - U.S.



- Mexican Wolf Program (canceled)
 - Pay-for-Presence, tied to presence and population success (pup survival rate)
 - No longer open due to logistical complexity of the program
- Washington (proposed)
 - Compensation for missing cattle, underweight cattle, and low pregnancy rates



Other Examples - Europe



Europe:

- Sweden & Finland
 - Payment for conservation performance → Paid to tolerate wolves
 - Verified wolf reproduction (dens, litters)
 - Presence of packs within management units

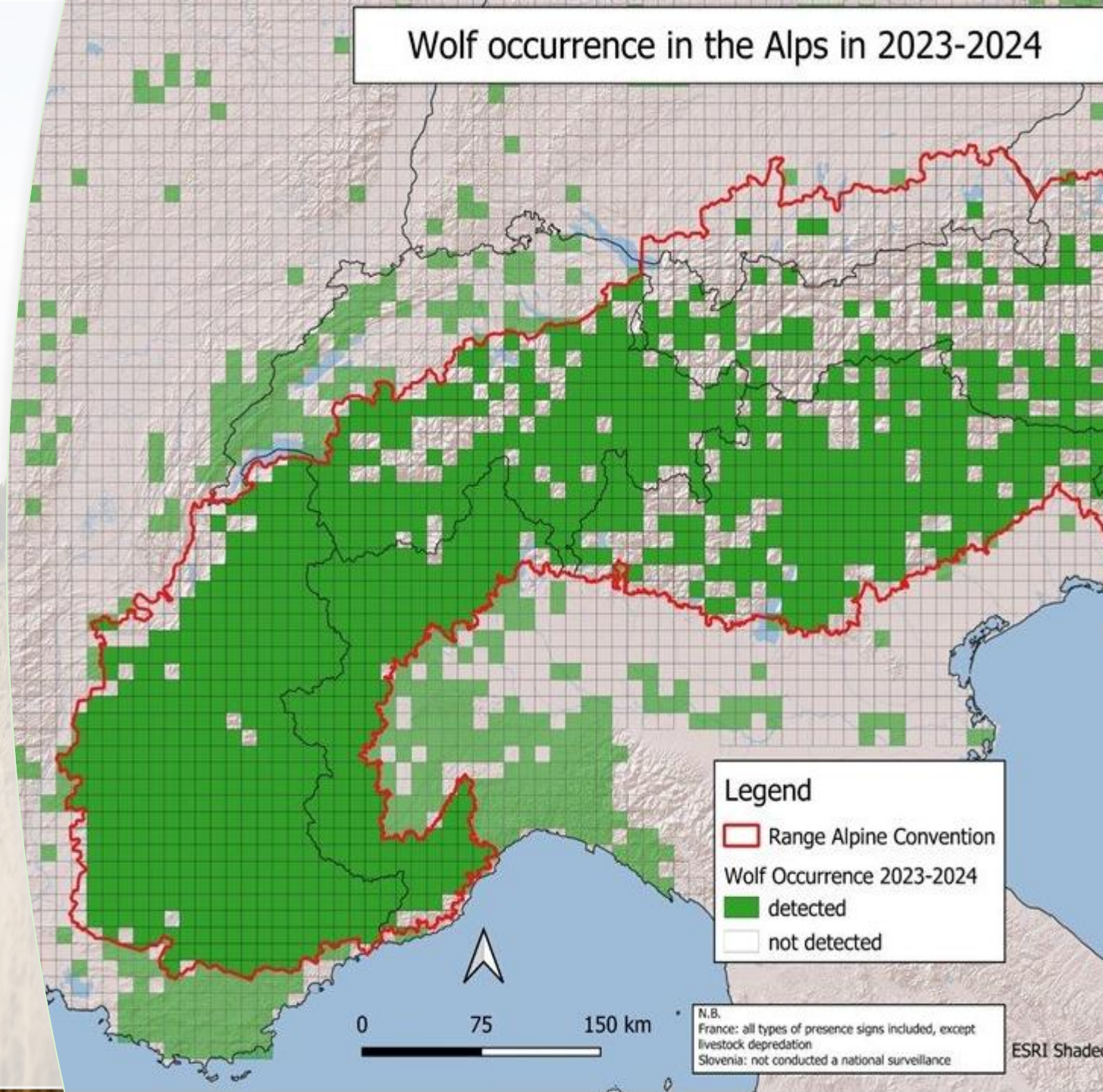


Other Examples - Europe

Italy (Piedmont Region)

- ± 464 wolves (2023-2024)
- **Indirect Loss:**
 1. 80% of veterinary costs
 2. Lump sum compensation for production losses, e.g., meat or milk
 - Based on size of herd (e.g., €100 for ≤ 100 animals, €300 for >100 animals)
 - Applicable to a specific herd once per reporting period
 3. 50% of carcass management and removal

Map courtesy of: Wolf Alpine Group (2024). The wolf Alpine population in 2020-2024 over 7 countries. Technical report for LIFE WolfAlps EU project LIFE18 NAT/IT/000972, Action C4.



Other Examples - Europe

Italy (Piedmont Region) cont.



• **Eligibility Criteria:**

- Producer or ranch must be registered to the regional Departement of Agriculture
- Trained veterinary* staff must confirm predation or applicant must provide accurate documentation to verify predation
- Use of non-lethal deterrents required
- The Region will not compensate for damages or losses to animals protected under insurance

How to Quantify Wolf Presence



Producer-based presence

- Submit evidence for P4P eligibility

Multiple Data Stream Presence Grid

- Create set grid across the state
- State, public, private data to determine presence eligibility
- Incentivize reporting = more accurate and more eligibility