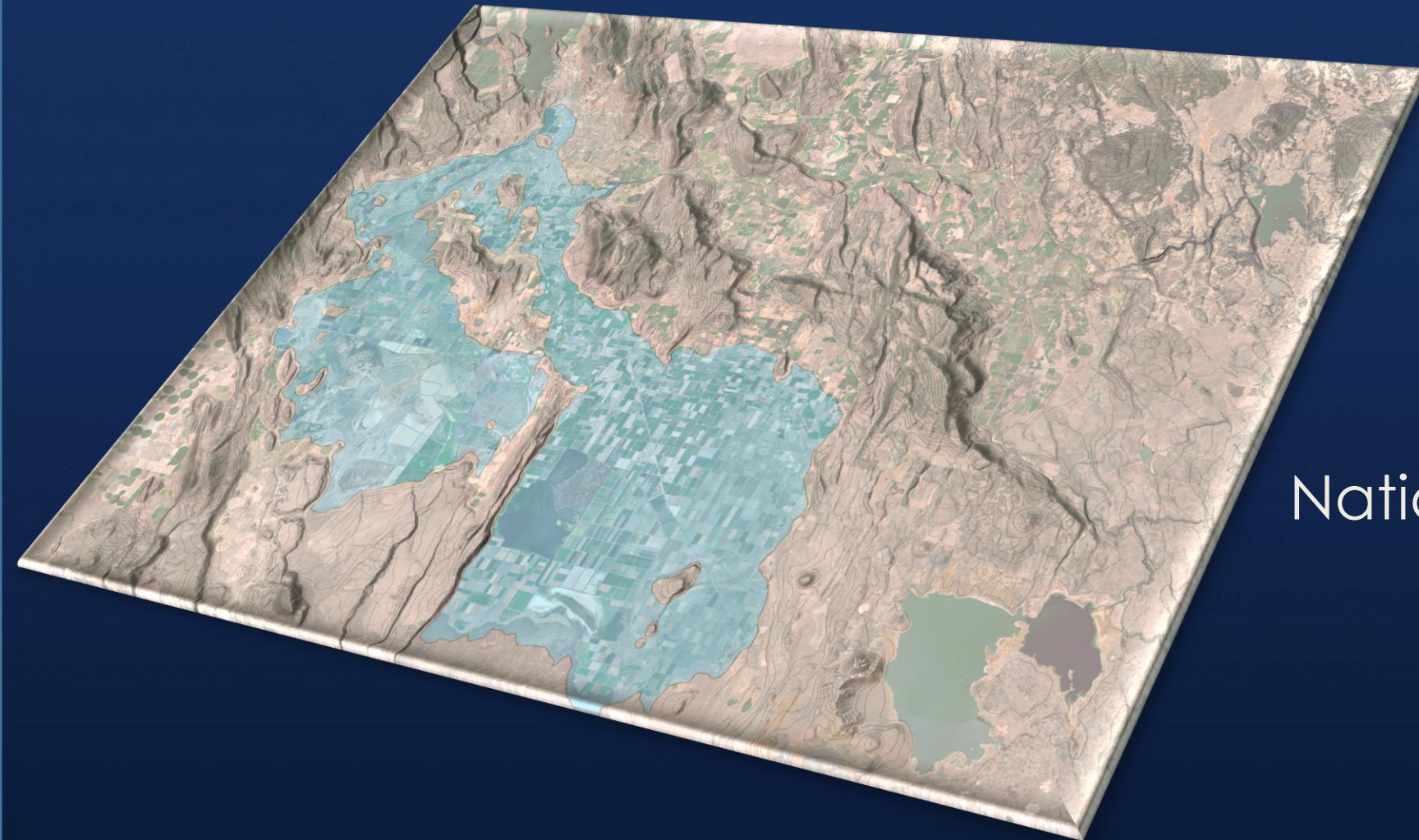




Habitat Conditions and Hunt Information



Lower Klamath
and Tule Lake
National Wildlife Refuges
2025



Meeting Purpose & Expectations

- Education on Refuge guiding principles, legislation, and management objectives that influence hunt planning.
- To provide information about habitat conditions and the 2025/2026 hunting season
- This presentation includes answers to the questions that we received via email
- After this presentation staff will answer questions, provided they are communicated respectfully



Thank You

- **Refuge Staff** – For the work they do every day in service to the public and the Refuge Mission
- **California Waterfowl Association** – advocacy, banding, disease management, and water support
- **Ducks Unlimited** – advocacy and habitat restoration
- **Oregon Bird Alliance** – monitoring and water advocacy
- **Tulelake Irrigation District** – wetland and waterfowl management collaboration
- **Klamath Drainage District** – advocacy and spring tailwater deliveries
- **Klamath Water Users Association** – advocacy and spring water deliveries to Lower Klamath NWR
- **All of You** – for supporting your National Wildlife Refuges



Klamath Basin NWRC

The Klamath basin National Wildlife Refuge Complex is made up of six Refuges in the Klamath Basin that include Tule Lake, Upper Klamath, Lower Klamath, Klamath Marsh, Bear Valley, and Clear Lake, whose combined mission is to protect what remains of what once was the largest wetlands area west of the Mississippi River. These surviving wetlands remain a highly managed yet critical part of the Pacific Flyway, a place where migrating waterfowl can rest and refuel.



Compatible Recreation

- Refuge managers do their best to balance the needs of wildlife, wetland preservation, and people
- Grounded in the Refuge Improvement Act 1997
- Six wildlife-dependent recreational uses are allowed when they are compatible with a refuge's purpose. They include hunting, fishing, wildlife observation, photography, environmental education, and interpretation
- A recreational use is compatible when it:
 - **Does not conflict with fish and wildlife habitat goals or objectives**
 - **Develops the public's understanding of, and appreciation for, their role in the conservation of our nation's fish and wildlife resources**
- Habitat and water management is based on wildlife needs first





The Kuchel Act

and Management of Lower Klamath and Tule Lake National Wildlife Refuges

After nearly a decade of debate between agricultural interests and conservationists over the future of the refuges, The Kuchel Act of 1964 dedicated the lands within the boundaries of Tule Lake and Lower Klamath NWRs to wildlife conservation for the primary purpose of waterfowl management, with a mandate of continuing an agricultural leasing program consistent with “proper waterfowl management”

At a time, when agricultural crops were viewed as a requirement for waterfowl in the Klamath Basin, and Tule Lake and Lower Klamath NWRs held unparalleled fall waterfowl populations of 5 to 7 million birds, the bill was viewed as a win-win solution.

The debate continues to this day



The Kuchel Act Cont.

Agriculture

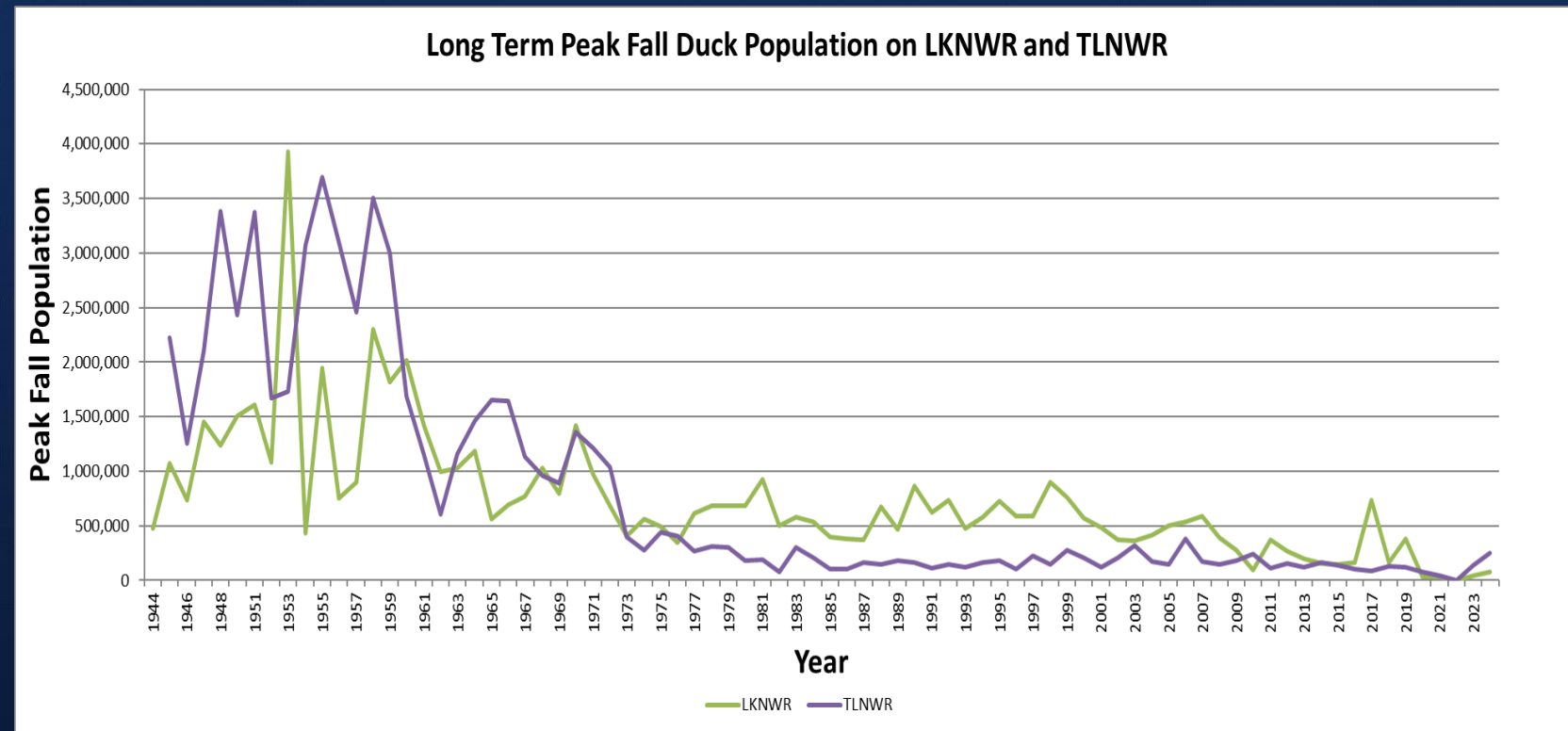
- The Kuchel Act of 1964 dictates how much refuge land can be used for certain crops and how much must be kept as wetlands to support waterfowl. The Bureau of Reclamation manages these agreements and keeps the money.
- One-third of the leased land can be used for row crops when proper waterfowl management has been achieved. Farmers decide what to plant and where.
- The refuge works with farmers to leave some grain behind for the birds on cooperative farmlands.
- The refuge can partner with farmers to manage flooding, grain left in the fields, and wetland areas. This can include both cooperative farmland and private or leased lands.
- Growing row crops on cooperative farmland helps increase the amount of grain left for birds, creates more wetlands, and allows better control of flooding during the fall.



Setting the Stage for Discussion

No Water - No Wetlands - No Birds

- The Klamath Basin received above average precipitation during the winter of 2024/2025, improving wetland conditions across the region, despite these gains, overall habitat conditions remain poor particularly at LKNWR.
- Both TLNWR and LKNWR received a much-needed spring water delivery which improved wetland conditions in spring and early summer.
- Fall water deliveries to LKNWR are uncertain and appear unlikely.
- Despite a good water year the Klamath Basin continues to see a decline in wetland habitat, both in total acreage and their ability to remain flooded.
- Waterbird populations reflect this reduction in habitat





Setting the Stage for Discussion Cont.

- Wetland Habitat on the Klamath Basin The National Wildlife Refuges continue to face severe threats, particularly related to water availability.
- Although conditions improved during fall 2024, the migrating waterbird population numbers remained alarmingly low.
- Our main goal is to enhance the refuges' habitat value throughout the year, allowing the wetland to support larger numbers of staging waterbirds, as well as those during the breeding, molting, and fall migration periods
- To achieve this, staff work within existing constraints to develop and maintain habitats that are accessible to the public and provide a sanctuary for birds. This ensures a rich habitat for birds and a high-quality experience for visitors.



Water Availability and Management

- Tule Lake NWR holds a priority water right under the Klamath Reclamation Project
- According to the 1964 Kuchel Act and a federal contract, flows from the Lost River outside of the irrigation season should terminate in Units 1A and 1B
- This has not consistently occurred throughout the past decade
- Wetland units 1A and 1B at Tule Lake (~13000 acres), along with 8,000 to 10,000 acres of perennial wetlands at Lower Klamath, are critical to meeting the Kuchel Act. Right now, those congressional mandates are not being met.
 - #1 Proper waterfowl management (habitat and food)
 - #2 Agricultural production (facilitate irrigation).



Water is Everything

- Despite the current biological opinion providing some limited water to refuges it lacks the recognition of water throughout the year which limits the refuges capacity to meet Pacific Flyway waterbird management plan objectives
- Reduced and unpredictable water deliveries to both refuges have made it impossible to properly manage waterfowl, which is the priority mandate required by the 1964 Kuchel Act
- This situation has affected and will keep affecting everything that depends on sound wetland and waterbird management, including agriculture
- Without adequate water deliveries, waterbird populations will continue to decline



Water is Everything Cont.

- Recent studies by the Intermountain West Joint Venture show that the main problem for waterfowl migrating in the fall along the Pacific Flyway is the lack of water on public lands and wetlands. These areas are holding water for shorter times because of increasing water shortages

<https://onlinelibrary.wiley.com/doi/full/10.1111/gcb.15010>

<https://www.frontiersin.org/articles/10.3389/fevo.2022.844278/full>

<https://esajournals.onlinelibrary.wiley.com/doi/10.1002/ecs2.2758>



Habitat Overview

Fall 2024 Spring & Summer 2025

- Although there's plenty of water in the watershed, delivery to the refuges has been limited.
- Tule Lake NWR wetland units 1A and 1B were filled and have been maintained all summer. Tulelake Irrigation District has done a fantastic job maintaining wetland elevations throughout the summer.
- Lower Klamath NWR Unit 2 has been maintained throughout the summer.
- Similarly, Lower Klamath wetlands 3, 6A, 6B2, 6C, 12C and the Stearns Units held water throughout most of the summer. Conditions are currently variable among these wetland units.
- Tule Lake NWR has numerous "walking wetlands" this year providing more wetland habitat throughout the refuge.
- Lower Klamath NWR was able to provide a full cooperative farming program this year.



Population Monitoring in 2024/2025

- Between fall 2024 and spring 2025, ten aerial surveys tracked waterfowl across the Klamath Basin
- Spring water deliveries brought more birds to Tule Lake and Lower Klamath during migration
- Nesting success rebounded, with an estimated 126,000–180,000 ducks produced
- Increased wetland habitat supported this continued recovery
- Funding cuts mean no aerial surveys in 2025–2026, ending the nation's longest-running refuge-based waterfowl survey.

2024/2025 Peak Fall and Spring Waterfowl Counts at LK and TLNWR

LKNWR			TLNWR		
	Peak Population	Date		Peak Population	Date
Fall Ducks	79,580	14-Oct-24	Fall Ducks	246,972	14-Oct-24
Fall Geese	18,390	14-Oct-24	Fall Geese	11,109	7-Nov-24
Spring Ducks	334,732	7-Mar-25	Spring Ducks	241,208	7-Mar-25
Spring Geese	24,088	18-Apr-25	Spring Geese	47,759	15-Jan-25

Although exciting to see populations increase, these are disheartening numbers for a landscape as important to continental waterfowl as the Klamath Basin



2025 Duck Banding

- Why does the Refuge Band Birds ?
 - Hunting harvest regulations in the Pacific Flyway are based on the Western Mallard Model
 - Bird banding helps biologists understand waterfowl populations, including their production, age, movement, survival, and harvest rates
- 2025 duck banding occurred in Units 2, 3, and 6A at LKNWR and wetland 1A and 1B at TLNWR
- Over 1,000 geese were banded at Lower Klamath, Tule Lake, Upper Klamath NWR's, and private lands in Oregon
- At this time 7,000 ducks have been banded between Tule Lake and Lower Klamath NWR's
- Banding will resume following the Youth Waterfowl Hunt





Disease in Waterbirds

- Disease is part of natural populations, however habitat conditions and water availability can and do exacerbate likelihood and impact on a population
- Wildlife disease levels have been low this year
- A small, ongoing botulism event has been present in Tule Lake NWR wetland 1A and 1B since mid-July
- Proactive water management by the Tule Lake Irrigation District has kept the outbreak from spreading
- Regular testing has shown no sign of Avian Influenza at Tule Lake or Lower Klamath National Wildlife Refuges



Tule Lake National Wildlife Refuge





Tule Lake Waterbirds

Fall 2024 Spring/Summer 2025

During Fall 2024 - conditions remained below average, waterbird populations were improved but below average

- Both 1A and 1B were full or filling
- Sanctuary habitat requirements for birds was met
- Both 1A and 1B were opened to hunting
- Botulism persisted into mid-November

In Spring/early summer 2025 - wetland habitat availability and conditions improved

- Spring migration numbers improved
- The number of breeding pairs and successful local reproduction was above average
- The number of young birds (broods) remained high
- The molting bird population increased compared to summer 2024
- Like 2024 the biggest increase in waterbird populations were seen in non-waterfowl species like grebes and ibis



Current Conditions on Tule Lake NWR

- Tule Lake NWR continues to struggle with infrastructure issues
 - Q Canal leakage (SW sump flooding)
 - 1A levee elevations (subsidence)
 - D-Plant pumping
- Wetlands 1A and 1B are currently full
- Increased pressure for winter cereals
- Continued expansion of alfalfa





Hunting on Tule Lake

Waterfowl

- Hunting for ducks and geese will begin one half hour before sunrise and end at 1:00 p.m. each day - No Full-Day Hunting
- **Wetland Unit 1A** (Oct. 4 – end of season)
Hunting is available on a first-come, first-served basis. Boat-in and walk-in access permitted.
- **Wetland Unit 1B** (Oct. 4 – Dec. 1)
Hunting is available by lottery for up to 10 parties, with each party limited to 4 hunters and 1 motorboat. Boat-in and walk-in access permitted.
- **Fry's Island Units** (Oct. 4 – Dec. 1)
Hunting is available by lottery for up to 6 parties (lots A-F). Boat-in and walk-in access permitted.
- **Wetland Units 1B and Fry's Island** (Dec. 2 – end of season)
Both units become free roam on a first-come, first-served basis, with the same party restrictions as above.
- **All Other Dry and Flooded Field Hunt Areas**
Will operate on a first-come, first-served basis with no daily drawing. Hunters may drive into fields to set up, but must exit fields before shooting time, which follows state shooting schedules.



Hunting on Tule Lake Cont.

Wetland Units 1B and Fry's Island Lottery

Access Unit 1B and Frey's Island Units A–F will be managed through an **online lottery** on the RecAccess website

- **Unit 1B:** open to 10 parties/day
- **Frey's Island:** open to 6 parties/day
- **October 4 – December 1**, with a single draw held for each day

Application Rules

- All parties must apply as a group
- A **Group Leader** must enter all members at time of application
- No changes allowed after payment
- If one member is selected, the entire group is selected.
- Group Leaders need each member's **RecAccess ID (RAID #)** and name
- An instructional video will be available on the RecAccess website

Lottery Schedule

- Opens: **9:00 a.m., 3 days before the hunt**
- Closes: **2:00 p.m., 2 days before the hunt**
- Hunters may apply for up to **two hunt days** at a time
- Winners chosen at random; results emailed and posted on RecAccess by **5:00 p.m., 2 days before the hunt**



Hunting on Tule Lake

Pheasant

- Pheasant hunting will be permitted within the established hunt area at Tule Lake National Wildlife Refuge, from 8:00 a.m. to sunset daily
- Pheasant populations at Tule Lake are low due to poor winter survival
- Upland habitat has improved in some areas but remains poor in others
- Hunters should expect generally low bird numbers this season, though some areas may hold concentrated flocks
- Reminder: Quail Hunting is not permitted on refuge lands at this time



Use CAUTION While Boating

- There are numerous obstacles (rocks, floating tule mats, large root balls, fencing material).
- Debris from old blinds is floating out there (pallets, timbers, boards) - many have exposed nails.
- The bottom is harder but still has deep holes, cracks, and soft spots that pose hazards.
- Restored channels are deep (6-12'), hard to see in places, and can quickly go over waders
- The southern hunt boundary line (1A) is harder to see – Portions of the wetland are now in closed zones.



INVASIVE PLANT ALERT !

Purple loosestrife is a highly invasive plant that threatens wetland habitats

- The plant occurs throughout wetland 1A and parts of wetland 1B and is now showing up at LKNWR and UKNWR
- Control is expensive, ineffective, and funds are being spent on loosestrife control at the expense of more needed habitat work
- Purple loosestrife reduces habitat quality for waterfowl and wetland dependent wildlife
- **Do Not** use this plant for blind material.
- Wash boats, decoys, waders, boots, etc. When leaving the refuge (there are several wash stations throughout TLNWR)
- Drain boats well
- Dispose of all blind material before leaving the wetland as it likely has loosestrife seeds in it





Public Health Notice – Water Quality & Disease

Avian Influenza

- Is present in the waterfowl population
- Use caution when handling, cleaning, and cooking harvested birds
- Follow CDC guidelines for safe handling and consumption

Toxic Algae

- Is present in refuge wetlands (OR & CA)
- TL & LK: levels remain below California health advisories for humans
- Risk to pets remains high – monitor dogs closely, especially early in the season
- Illness in dogs may appear as skin problems or other health issues

Lower Klamath National Wildlife Refuge





Current Conditions on Lower Klamath NWR

- **Unit 2:** Maintained for sucker recovery (per 2024 Biological Opinion)
- **Unit 3:** Held water most of summer; deliveries now terminated
- **Unit 6A:** Receiving limited water; some wetland expected through fall
- **Lower Klamath NWR:** Not expected to receive additional water in early fall
- **Area K:** May see fall water; flooding managed outside refuge control
- **Looking Ahead:** For waterbirds and hunting to recover, Lower Klamath NWR needs consistent summer and fall water deliveries to restore permanent wetlands
 - Attract more migrating waterfowl to stop at the refuge.
 - Provide quality sanctuary with more food and less disturbance.
 - Allow flexible water management so habitat is ready when birds need it.



Hunting On Lower Klamath

Waterfowl (OR and CA)

- Hunters may hunt within designated hunt areas
- Hunting will begin one half hour before sunrise and end at 1:00 p.m. each day - No Full-Day Hunting (OR & CA)
- All Hunt Areas Will operate on a first-come, first-served basis with no daily drawing. Hunters may drive into fields to set up, but must exit fields before shooting time
- Seasonal road closures (4C–8B) will occur only if wetlands begin to flood.
- Hunters should plan ahead, as access may change during the season.



Hunting On Lower Klamath Cont.

Pheasant (OR and CA)

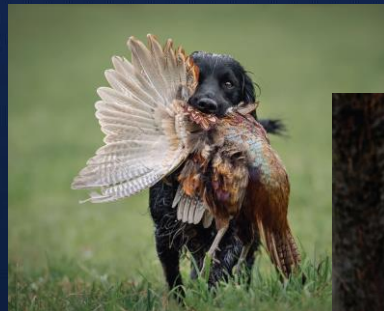
- Pheasant hunting will be permitted within the established hunt area at Lower Klamath NWR, from 8:00 a.m. to sunset daily
- Seasonal road closures (4C–8B) will occur only if wetlands begin to flood
- Pheasant populations at Lower Klamath are low due to poor winter survival
- Upland habitat has improved in some areas but remains poor in others
- Hunters should expect generally low bird numbers this season, though some areas may hold concentrated flocks
- Reminder: Quail Hunting is not permitted on refuge lands at this time



Pheasant & Waterfowl: Reducing Conflict

Complaints from Last Season

- Walking near or through waterfowl hunting spreads
- Walking down levees where hunters are set up
- Driving into closed areas or on closed roads
- Parking outside designated areas
- Hunting in closed areas
- Safety concerns, including one accidental shooting (non-fatal)
- Overcrowding in hunt areas
- Taking low/unsafe shots



How to Avoid These Issues

- Stay clear of waterfowl hunting spreads and levees with hunters.
- Drive only on open roads and park in designated areas.
- Hunt only in open areas—closed areas are off limits.
- Practice safe hunting: avoid low shots, crowding, and unsafe behavior.
- Be respectful of other hunters and refuge users to reduce conflicts.
- Keep safety first—everyone deserves a safe and fair experience.



General Hunting Program Reminders

- Hunt information and area maps will be posted on our website before the season begins.

Please:

- Launch boats only at designated public sites.
- Do not walk or drive through areas where others are hunting.
- Follow refuge speed limits.
- Obey all posted signs (“Area Closed,” “No Motorized Vehicles,” “Parking”); assume roads are closed unless marked open.



Please Hunt Responsibly

Respect Others • Respect Wildlife • Respect Your Refuge

Respect All Refuge Users

- If a spot is taken, come back later
- Hunt safely and give each other space
- Avoid low shots and conflict
- Don't yell or drive boats/vehicles aggressively
- Everyone hunts differently—be considerate
- Not all visitors are hunters; set a positive example

Respect Wildlife

- Avoid high shots
- Only shoot where you can retrieve game
- Retrieve all game
- Don't leave carcasses in roads, parking lots, or trash cans





Questions Submitted by Email

Refuge received questions via email from 7 people

- The questions were about different topics:
 - Access (1 question)
 - Draw/blinds (2 questions)
 - Guides (1 question)
 - Regulations (2 questions)
 - Pheasant Hunting (0 questions)
 - Management (4 questions)
- The next slides will answer the questions that were sent in that were not answered above.
- Staff will try to answer additional questions during breakout sessions at the end of the presentation



Access Questions

Not Answered Above

Will the Oregon LKNWR lands (Area K/Straits) be reopened for all day hunting?

- No. Conditions in the Klamath Basin have only slightly improved
- Wetland habitat and undisturbed food sources remain limited for migrating and staging waterfowl
- Afternoon closures help ensure the hunt program meets compatibility requirements when habitat is scarce
- Afternoon closures are common in both Oregon and California on state and federal lands, keeping Klamath Basin NWRs consistent with statewide regulations



Draw & Blinds Questions

Not Answered Above

Tule Lake Field Unit spaced blind parking area markers/signs were removed - why?

- The refuge was unaware of the missing signage and will ensure all parking lots shown on the map are properly signed

Why can't the hunt program go back to the way it was run for 30 years with multiple staff, and check station, and spaced blinds?

- Public lands face reduced budgets, rising costs, and fewer staff than in past decades. These challenges limit the ability to maintain the same level of services and access that was possible in previous years



Guide Questions

Will the refuge eliminate the guiding permits?

- No, guides help bring hunters who might not otherwise visit
- They support access to refuge lands, local small businesses, and the local economy
- Only three guide permits are active on LKNWR/TLNWR, with a few also on UKNWR
- Habitat limits can create the feeling of competition, but that exists whether hunters are guided or not
- Guided groups count as one hunting party
- Many complaints about guides have proven unrelated upon review
- Permitted guides must uphold USFWS standards; misconduct can result in permit loss
- Guiding without a permit is a violation and should be reported



Regulations Questions

Will there be boat access for overwater hunting? If not, why?

- Boat access is permitted in most flooded waterfowl hunting areas. There are some restrictions on motorized boats in certain areas.

What is a party for the 1B and Frey's Island Draw -

- A party in the 1B and Frey's Island lottery is up to 4 hunters (or 4 hunters and one non-hunting guide)
 - 1 motorized boat (a party can only be 1 motorized boat)
 - 4 walk in hunters hunting **together** as a group
 - 4 kayak/layout boat hunters hunting **together** as a group
- A party is not:
 - 2 or more motorized boats hunting together



Management Questions

Since early Spring has the refuge received any water? If not, why? If it did, when and who provided the water and paid for it and how much was received?

- TLNWR has been receiving consistent water all summer
 - TLNWR deliveries are a mix of Biological Opinion water for sucker recovery and irrigation delivery for agricultural lands on TLNWR (managed by TID). Daily delivery throughout the summer has ranged from 20-100 cfs depending on upstream hydrology
- LKNWR received a large volume of water in the spring but minimal delivery the remainder of the summer
 - A large portion of LKNWR was delivered back to the Klamath River to offset project demand (Deferred Project Supply / DPS). Biological Opinion water has been delivered through the summer to Unit 2 (sucker recovery). A water right purchased from an UKL water user has been providing some water to LKNWR
 - Daily summer inflows have been approximately 40 cfs (biop + water transfer)



Management Questions – Cont.

Has staff size been reduced in the past three years? If so, why?

- Yes, refuge staff size has been reduced
 - Budget reductions
 - The Deferred Resignation Program (DRP)
 - National hiring freeze

In the past the refuge's website provided updates on conditions and habitat throughout the year. This spring the website has provided no information. Why?

- Staffing shortages and higher workloads mean staff must focus on safety and mission-critical services first, so some tasks (like website updates) can not always be completed in a timely manner

Who controls the water to the units East of A dike and why do they block field hunting access

- The lots directly east of A Dike are primarily coop agriculture units where the Refuge staff have some direction on flooding.
- The Tululake Irrigation District does have some level of discretion but works collaboratively with refuge staff to maximize waterfowl benefits
- The field access points should not be blocked, if they are please let refuge staff know



Management Questions – Cont.

What is the status of the Agency Lake dike removal and habitat conditions?

- The UKNWR Barnes and Agency Reconnection Phase I was completed in January 2025
- Two small breaches were constructed and UKL is now connected to wetland
- Refuge staff are excited about the emerging habitat conditions, but it will be several years before the habitat can be considered restored.
- Currently the site is seeing high waterbird use





Thank You !

Please Contact us with Questions

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