

Understanding County Noxious Weed, Pest and Mosquito Abatement Programs *Authority, Duties, Organization*

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Ada County Weed, Pest and Mosquito Abatement



Why Should County Officials Care?

County abatement programs are created and funded for:

- Protection of public health
- Protection of agriculture and natural resources
- Statutory responsibilities - legally required
- Taxing and expenditure authority - tax collection might be tied to provided services
- Emergency preparedness, coordination across jurisdictions



Three Questions:

AUTHORITY:

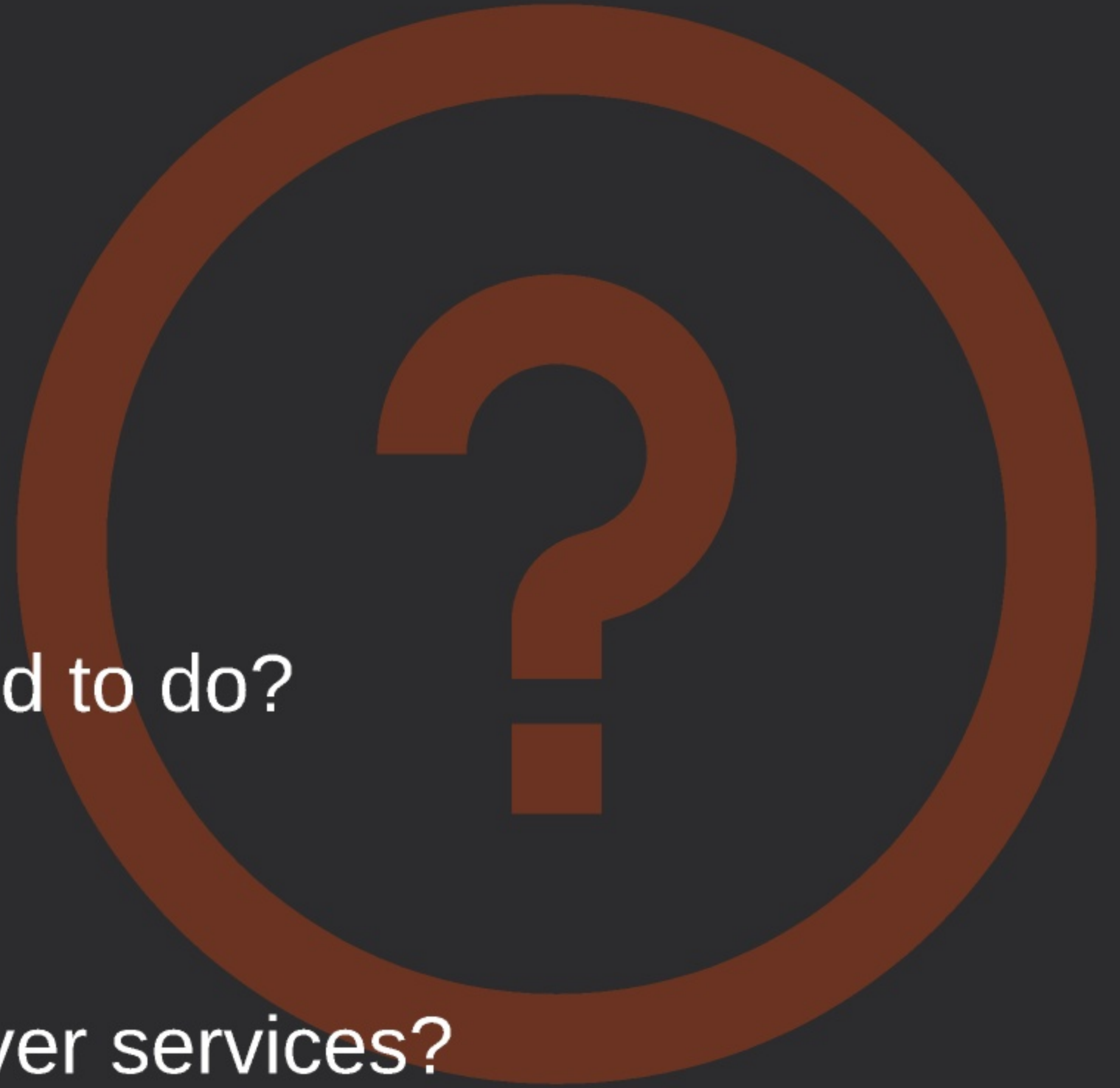
What gives the County authority to act?

DUTIES:

What are the programs expected or required to do?

ORGANIZATION:

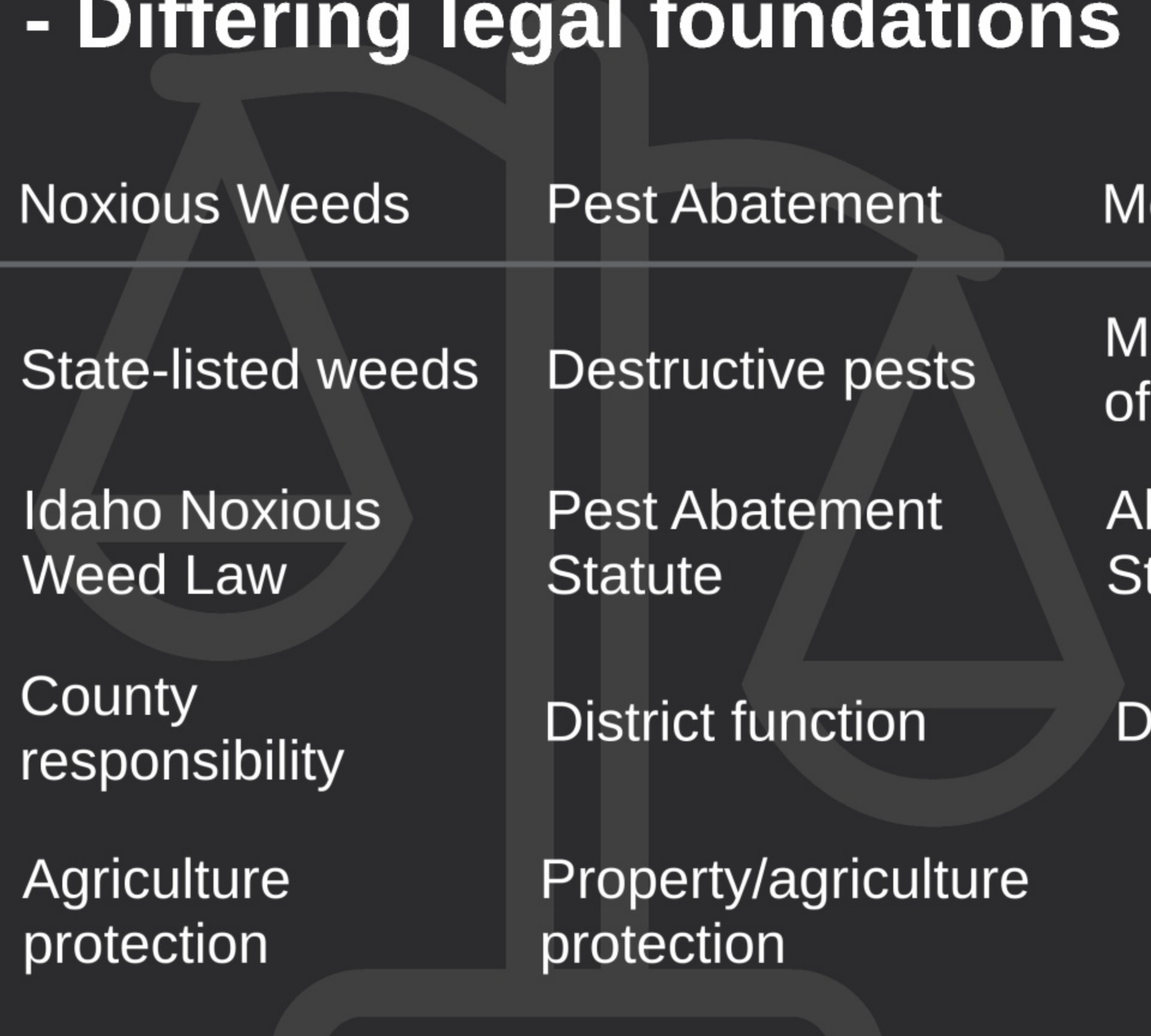
How can Counties structure, fund, and deliver services?



Authority

Why are we legally allowed to provide services?

AUTHORITY - Differing legal foundations



	Noxious Weeds	Pest Abatement	Mosquito Abatement
Concern	State-listed weeds	Destructive pests	Mosquitoes, vectors of disease
Legal Authority	Idaho Noxious Weed Law	Pest Abatement Statute	Abatement District Statute
Government Role	County responsibility	District function	District function
Primary Driver	Agriculture protection	Property/agriculture protection	Public health, nuisance

AUTHORITY - Noxious Weed Control

Noxious Weed Control departments have the authority to:

- "Enter upon all lands within the county where there are noxious weeds to ascertain conditions, if a reasonable attempt has been made to contact the landowner and where possible the operator of the land prior to entry and there is probable cause for entry"
- Serve notice to control noxious weeds, require response from landowner
- Control noxious weeds at the expense of the landowner
- Lien properties for non-payment of fees associated with noxious weed control services
- "Quarantine any tract of land under its jurisdiction when it appears there is an infestation of noxious weeds beyond the ability of the landowner to control and put into immediate operation the required means for the control or containment of such noxious weeds including necessary destruction of crops"

AUTHORITY - Mosquito Abatement Districts

Under Idaho Statute Title 39, Ch. 28 - Abatement Districts

- " The abatement district board of trustees is authorized: To appoint a director to direct the activities of the district, in accordance with training and experience necessary to fulfill the duties of the position"
- "To take all necessary and proper steps for the control of mosquitoes and other vermin of public health and welfare importance in the district and for these purposes shall have the right to enter upon any and all lands"
- "To abate as nuisance breeding places of mosquitoes or other vermin of public health and welfare importance within the district or within migrating distance of the district by use of chemicals or permanent control measures and in this connection have the right to enter upon any and all lands"

AUTHORITY - Pest Abatement Districts

Under Idaho Statute Title 39, Ch. 28 - Abatement Districts

- 25-2601. "The board of county commissioners of each and every county of this state are all hereby granted full power and authority to declare any predatory animal, including coyote, that feeds upon, preys upon or destroys any poultry or livestock of any kind upon any public or private lands within their respective counties, or any rodent, jack-rabbit, gopher, ground squirrel, cricket, locust, grasshopper and other insect pests or plant disease causing organisms/agents or any other invertebrate organism that feeds, preys upon, or destroys any livestock, natural grasses, or cultivated crops of any kind upon any public or private lands within their respective counties, to be agricultural pests, and to take all steps that they may deem necessary to control such pests."

Duties



We have the authority to act -
what are we required to do?

Duties - Noxious Weed Control

Counties are required by Noxious Weed Law to employ a Superintendent and have a noxious weed control program

Boards of County Commissioners have wide discretion as to how these programs operate

- Survey and identify noxious weeds
- Work with landowners - educate, provide compliance assistance
- Conduct control measures according to action plans, category of noxious weed
- Enforcement when necessary
- Coordinate with state, federal, municipal, and private landowners to control noxious weeds on public ground, in rights-of-way

Identify → Notify → Control → Enforce → Monitor



Duties - Mosquito Abatement

- Protect public health and welfare by reducing mosquito populations and mosquito-borne disease risk (West Nile virus)
- Monitor mosquito populations and disease activity
- Identify and manage mosquito breeding sources
- Apply appropriate control measures, including larval control, adult mosquito control, source reduction
- Coordinate with landowners and partner organizations such as irrigation, drainage, flood-control, public-health, and governmental agencies
- Plan, budget, document, and report program activities to maintain accountability and demonstrate effectiveness

Surveil → Assess Risk → Prevent → Control → Evaluate



Duties - Pest Abatement

- Protect property from damage caused by rodents or other pests as determined by special taxing district rules (**Pocket gophers, Yellow-bellied marmots**)
- Identify pest species, infestations, affected properties, and areas of recurring activity
- Evaluate pest abundance, damage, public impacts, treatment feasibility, and priorities for response
- Use appropriate trapping, baiting, fumigation, habitat modification, exclusion, or other control measures to reduce damaging pest population
- Reinspect treated areas, track recurring infestations, document pest activity, and identify emerging problem areas

Detect → Assess → Suppress → Monitor → Evaluate



Pocket gopher damage, credit: University of Florida/IFAS Ext. Marion County



Marmots in engine compartment, credit: Matthew Mulholland

Organization

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How do we provide services?

Organization - Funding

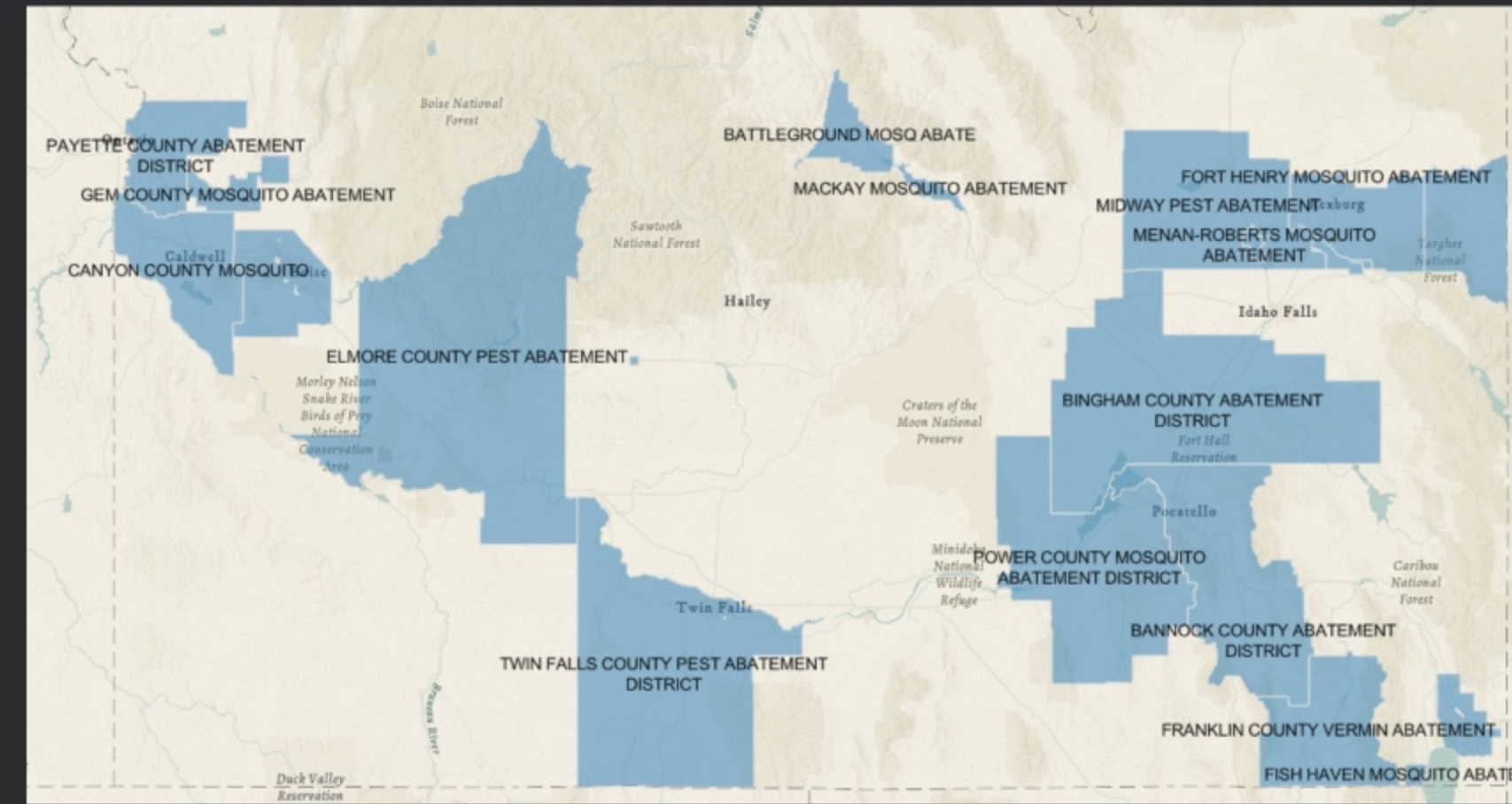
County Department:

- General fund (County property tax)
- Covers the entire County
- Board of County Commissioner oversight*

Special Taxing District:

- Defined jurisdiction, borders (might not be entire county)
- Dedicated levy - only landowners within boundaries pay special levy, receive services
 - Funds cannot be used for other purposes
- May be directed by Board of County Commissioners, **or** Board of Trustees appointed by County Commissioners

*County Commissioners may select advisory boards
program direction, public engagement



Mosquito abatement districts in Idaho

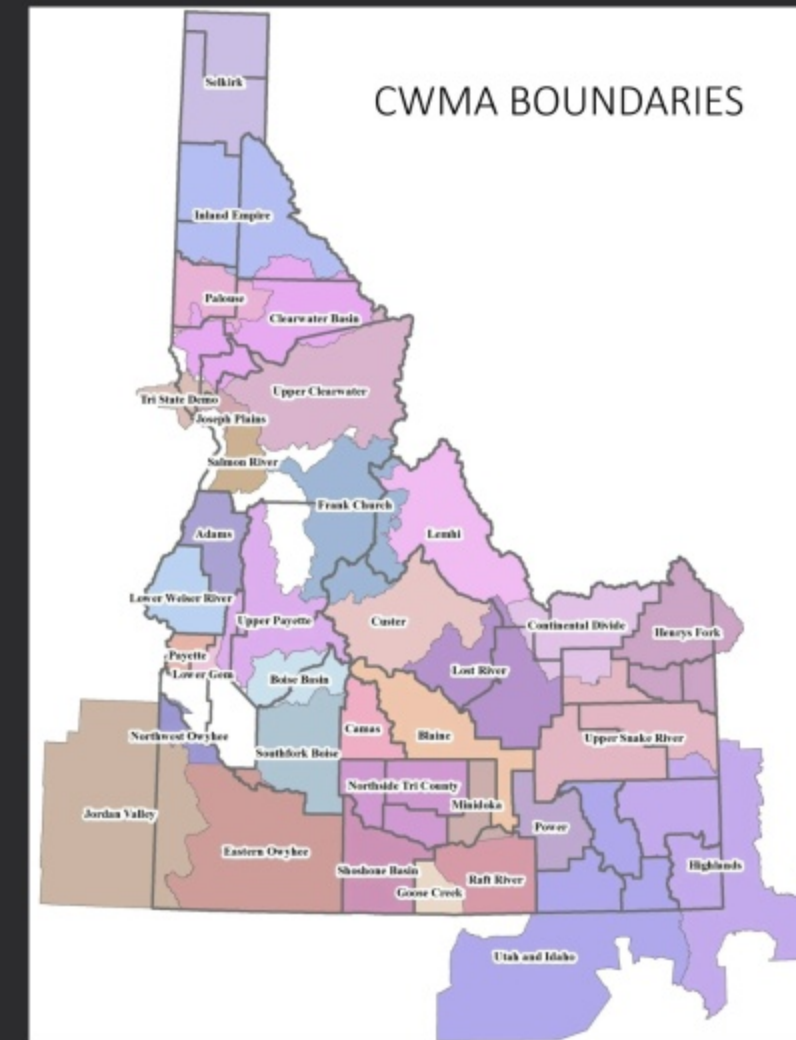


Ada County Pest Abatement District boundaries

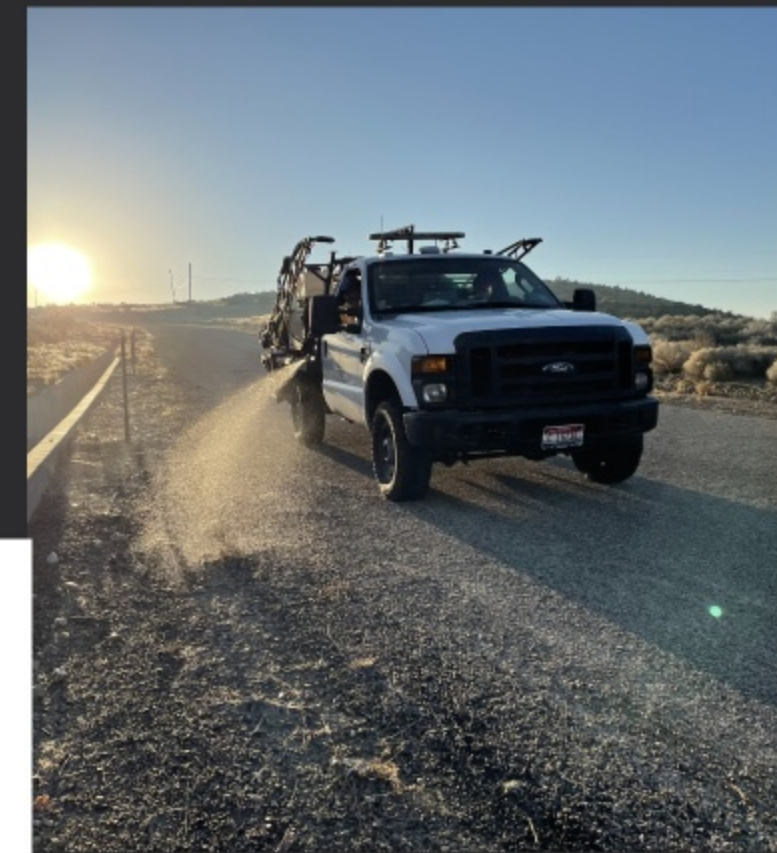
Organization - Noxious Weed Control

Noxious Weed control programs are County departments

- Superintendent can be FT or PT, or have shared responsibilities
- Can have FT employees, budget dependent
- Most programs charge for control services
- Services can be provided to constituents, external government agencies, commercial property - wherever noxious weeds are growing
- Cooperative Weed Management Areas - grant funding for herbicides, special projects



Cooperative Weed Management Areas in Idaho; ISDA



Roadside application



Spotted knapweed infestation

Organization - Mosquito Abatement

Most mosquito abatement programs are special taxing districts

- Directors can be FT, PT, shared or contracted
- Can have FT employees, budget dependent
- **All are highly-dependent on seasonal labor**
- Special taxing districts typically ***do not charge*** for services (levy-funded)

Service components:

- **Surveillance** - trapping mosquitoes and testing for disease
- **Larvicide** - discover, monitor, treat standing water sites with naturally-occurring bacteria to prevent hatch (most of the work we do is preventative)
- **Adulticide** - respond to flying mosquito pressure using ULV applications to kill adult mosquitoes



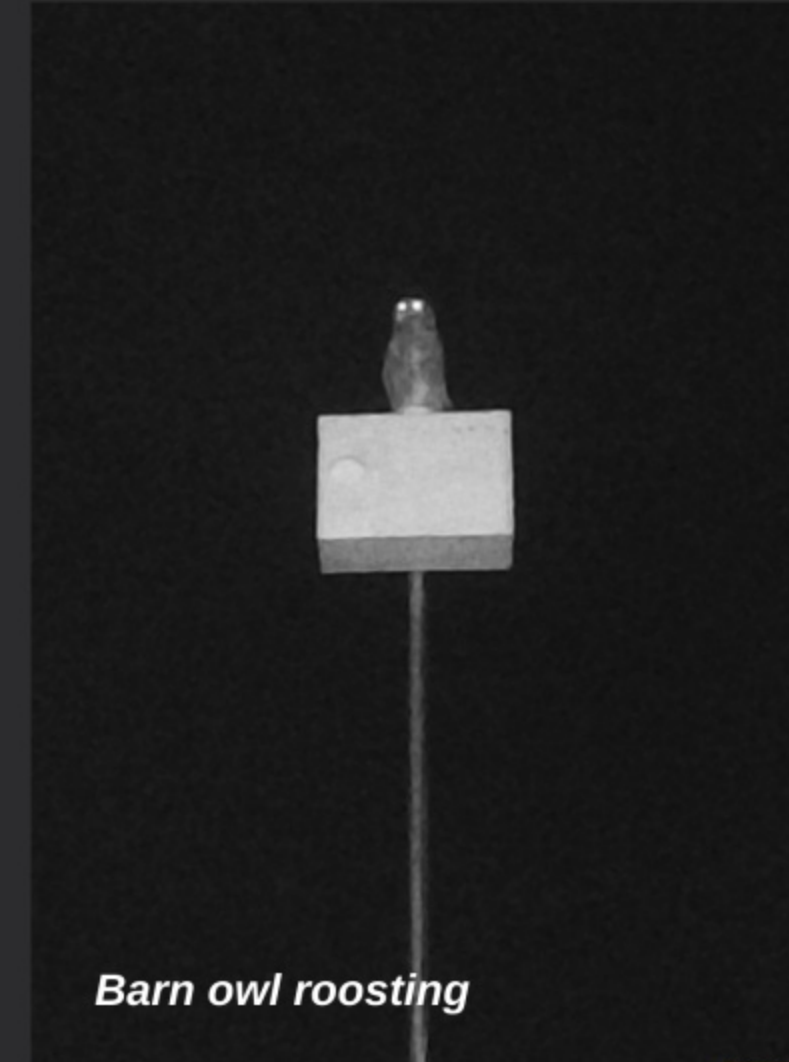
Organization - Pest Abatement

Most pest abatement programs are special taxing districts

- Directors mostly share responsibility (weed and pest)
- **All are highly-dependent on seasonal labor**
- Special taxing districts typically ***do not charge*** for services (levy-funded)

Pest abatement:

- Gopher and marmot control (County-dependent)
- Trapping, baiting, smoke cartridge applications, Carbon monoxide applications, biocontrol production
- Fall and spring are when rodents most active
- Applications vary based on site conditions, environment, infestation levels



Barn owl roosting



Smoke cartridge application



Setting gopher trap

Integrated Pest Management

Integrated Pest Management - a systematic approach using multiple methods to prevent or reduce pest problems, minimize risks

Identify → Monitor → Establish Thresholds → Prevent → Control → Evaluate

Control with best and most appropriate combination of:

- **Cultural controls** - reduce or eliminate standing water on property to eliminate mosquito habitat
- **Physical/mechanical controls** - Weed cloth in flower beds to reduce noxious weed seed from germinating
- **Biological controls** - Owl boxes where rodent infestations are heavy
- **Chemical controls** - Spraying noxious weeds on roadsides to prevent traffic accidents



IPM Diagram Courtesy: EPA

Education

Educating the public about how to prevent and control pests *is the most important thing we do.*

We can prevent fear, misinformation, and public distrust with proactive communication and education!



Resources:

The following organizations are designed to support service programs with ongoing education opportunities, industry contacts, peer-to-peer support, and product training:

- Idaho Association of Noxious Weed Control Superintendents
- Idaho Noxious Weed Control Association
- Idaho Mosquito and Vector Control Association
- American Mosquito Control Association
- Idaho Pest Management Association
- Idaho State Department of Agriculture - regulation, compliance assistance



Wrapping up...

- **Authority matters.**
Know which statute creates the responsibility
 - **Boundaries matter.**
County and district jurisdictions may not be the same
 - **Mission matters.**
Weed, pest, and mosquito programs solve different public problems
 - **Organization can vary.**
Programs should reflect county size, risk, resources, and service expectations
 - **Coordination matters.**
The most effective programs operate across organizational and jurisdictional lines
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Thank you!