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## REVITALIZING THE REGENERATIVE CAPACITY OF DAMAGED ECOSYSTEMS

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### NEW MEXICO BEAVER COALITION

**Meeting Date/Time: April 4, 2024, 10:00-11:30**

The purpose of the New Mexico Beaver Coalition is to bring together a diverse group of state, federal, tribal, non-profit, for-profit organizations, and individuals to share information, coordinate activities, and identify common interests and opportunities to work collaboratively to expand the distribution of beaver across New Mexico.

- I. Introductions (posted in the chat)
- II. Reviewed Operating Principles (from The World Café, <https://theworldcafe.com/>):
  - Create hospitable space;
  - Explore questions that matter;
  - Encourage each person's contribution;
  - Connect diverse people and ideas;
  - Listen together for patterns, insights and deeper questions;
  - Make collective knowledge visible.

### III. Meeting Process

- Summarized meeting process (10 minutes)
  - Beaver Habitat Restoration
  - Beaver Relocation and Coexistence Strategies
  - Education and Outreach
- Attendees selected their break-out group and working group meets (45 minutes)
- Returned and reported out to main group (30 minutes)
- Meeting wrap-up and scheduling of next meeting (5 minutes)

### IV. Agenda Items and discussion questions for Working Groups:

- a. **Beaver Habitat Restoration Working Group (Leaders: Reid Whittlesey and Peggy Darr)**
  - i. Documenting restoration strategies;
  - ii. Establishing habitat restoration standards of practice;
  - iii. Providing technical guidance/workshops; and
  - iv. Identifying and compiling funding opportunities.

#### Discussion Questions:

- How do we scale up and increase beaver habitat restoration?
- What are the obstacles to implementing Low Tech Process-Based Restoration?
- How can we overcome some of these obstacles?
- Why do we need beaver distribution and habitat mapping tools? What tools are currently available and what is the BRAT model?

- How do we align relocation plans with restoration efforts?
- Who else should be involved in this group?
- Who would be the target audience for technical guidance/workshops?
- Action Steps:
  - Identify highest priority actions
  - Next meeting

**b. Beaver Relocation and Coexistence Strategies Working Group (Leaders: Chris Smith and Steven Fry)**

- Identifying existing policies;
- Facilitating agency and stakeholder coordination;
- Promoting beaver distribution and habitat mapping tools; and;
- Evaluating approaches from neighboring states and established frameworks.

Discussion Questions:

- What are the current policies around coexistence? Relocation?
- What are the obstacles to beaver coexistence and relocation?
- How is New Mexico different than other states with respect to beaver coexistence and relocation?
- Why do we need beaver distribution and habitat mapping tools? What tools are currently available and what is the BRAT model?
  - What other mapping tools are developed that could be combined with a BRAT?
  - What besides mapping and modeling tools should be developed to further efforts?
- Who are our current legislative leaders on pro-beaver policies?
- Who else should be in this working group? What else should we be considering?
- Action Steps:
  - Identify highest priority actions
  - Next meeting: In-Person Beaver Chat?

**c. Education and Outreach Working Group (Leaders: Nav Khalsa and Toner Mitchell)**

- Describe current approaches and best practices including sample projects;
- Identify and record benefits;
- Organize educational events; and
- Assist with preparation and cataloging of presentations.

Questions:

- Who are the target audiences for education/outreach?
- What are the mechanisms and outlets for education/outreach? (Different for different audiences?)
- What resources already exist (nationally, regional)?

- What resources need to be created? Do we need a communication plan about beaver?
  - Who else should be at the table?
  - Are there local beaver references (specific to New Mexico) that should be updated?
  - How can we collect and share stories about positive beaver experiences?
  - How can we enlist local community members as members of the beaver coalition, allies and trusted individuals around beaver outreach? Social science has a role in education and outreach.
  - Action Steps:
    - Identify highest priority actions.
    - (Note that April 7<sup>th</sup> is National Beaver Day)
- V. Report-out for each Working Group: See below for meeting notes from each subgroup.
- a. Beaver Habitat Restoration
  - b. Beaver Relocation and Coexistence Strategies
  - c. Education and Outreach
- VI. **Wrap-up and next meeting (Confirmed for June 13, 2024, in-person in Santa Fe)**

## **NM Beaver Coalition– Subgroup A**

### **Beaver Habitat Restoration Meeting Notes**

**April 4, 2024**

- 1. How can we scale-up and increase beaver habitat restoration?**
  - a. *Include private lands; conservation easements can be placed on restoration sites to protect them*
  - b. *Working with and developing a diverse group of stakeholders*
  - c. *Prioritization tools such as:*
    - i. *BRAT model for NM (Funding pending from NM Game and Fish)*
    - ii. *Virtual beaver dam survey for NM (currently being conducted by Utah State University and paid for by Defenders of Wildlife)*
    - iii. *Ribbons of Life (National Wildlife Federation and NM Natural Heritage)*
    - iv. *Beaver Restoration Guidebook (USFWS)*
    - v. *Satellite and Airborne Remote Sensing Applications for Freshwater Fisheries (Trout Unlimited)*
    - vi. *NM Riparian Habitat Map (NM Natural Heritage)*
    - vii. *LTPBR geospatial analysis tool for the Colorado River Basin (National Forest Foundation)*

- d. *Create “stepping stones” of habitat restoration between known, active beaver colonies, to allow beavers to naturally spread faster*

**2. What are the obstacles to implementing Low Tech Process-Based Restoration?**

- a. Absence of beaver food because of overgrazing and browsing by cattle and elk.
- b. Difference in priorities amongst agencies
- c. Politics hinder agencies
- d. Lack of understanding about LTPBR

**3. How can we overcome these obstacles?**

- a. *Education, especially to livestock grazers, including grazing allotment lease holders on federal lands*
- b. *Tap into restoration money provided by the Bipartisan Infrastructure Act; NRCS program has a lot of this funding available through its CRP program, and other programs*

**4. Why do we need beaver distribution and habitat mapping tools? What tools are available and what is a BRAT model?**

- a. *See notes for question #1 above*

**5. How do align relocation plans with restoration efforts?**

- a. *Use mapping tools to identify areas that need beavers; have a list of areas that need beavers and are ready for beavers*

**6. Who else should be involved in this group?**

- a. *Did not discuss; ran out of time*

**7. Who should be the target audience for technical guidance/workshops?**

- a. *Did not discuss; ran out of time*

**8. Action Steps**

**a. Identify highest priority actions**

- i. *Did not discuss specifically, ran out of time, but in discussion for question #1 the need for a meeting and/or workshop to discuss all the prioritization tools available, and how to use them, was identified as a need/action step*

**b. Next Meeting**

- i. *Did not discuss, ran out of time; next meeting will likely be when the entire NM Beaver Coalition Meets (currently proposed for June 13, 2024)*

## Beaver Coalition 4.4.24 – Subgroup B, Relocation and Coexistence, Meeting Notes

Chris Smith, Jackie Corday, Ashley Hom, Bryan Bird, Adeline Murthy, Sristi Kamal, Ellen Soles, Bradley Allen, Bob Parmenter, Cecil Rich, Stephanie Siemek, Paige Handley, Jared Wood, Steven Fry, Andre Silva, Kevin Carns, Michael Dax

### Discussion Questions:

#### 1. What are the current policies around coexistence? Relocation?

- 3 documents shared from Nic Forman – will include in the meeting notes.
- Area for these documents is NMDGF across NM state, exceptions for sovereign nations.
- DGF controls wildlife management, including trapping and relocation
- FS could do relocation on their own properties, haven't done it before for beaver but the courts have upheld their authority. – also applies to BLM and other federal land agencies.
  - Can you transport across state lines?
    - Can likely happen but logistics and biological considerations would likely limit this.
  - In general, defer to the State and a robust criteria for what's needed to do relocation. Aquatic species concern, around disease, is legitimate
- Collaboration across agencies, especially when crossing jurisdiction, is paramount
- There is a 5 mile stream length consideration with relocation, but on federal lands its not as a big of an obstacle
- Trapping closures on 3 southern Forests in NM, relic of a time when they were trying to rebuild the populations.
- Request to Cecil and Andre for documents on federal authority to relocate on their lands -  
[https://scholarworks.umt.edu/cgi/viewcontent.cgi?article=1186&context=faculty\\_lawreviews](https://scholarworks.umt.edu/cgi/viewcontent.cgi?article=1186&context=faculty_lawreviews)
- A need to compile a policy document that is acceptable for the State to relocate the beaver
- Jackie shared a copy of the policy in Colorado in the chat– [same in Oregon](#)
  - Anyone can apply for a permit
  - June 1<sup>st</sup> and September 1<sup>st</sup> – timing restriction to increase beaver survival
  - Release site will be evaluated for habitat features, size, proximity to infrastructure, avoid areas of recent die offs, conflicts up and down the stream, etc.
- Examples from Valle Caldera – State will be handling the relocation activities. Bob Parmenter has more info.

- Scientific research permit needed, setting one up for this summer, also a IUCAC permit for live captures and transport.
  - CE in NPS NEPA for reintroducing native wildlife species.
  - Working with Nick Forman for relocation of beaver to VCNP.
- NMDGF is interested in compiling information for their game wardens and private lands staff in regards to coexistence structures so they can share with private landowners who are open to coexistence, as well as list of contractors who can provide those services.
  - Tried to do this before with DGF, and it went nowhere (Bryan Bird)
  - Defenders of Wildlife has developed their [own brochure](#) and offers a cost-share program. Also have a cost-share program to offset costs of coexistence structures with Rio Grande Return and Santa Fe County.
    - [Storymap](#)
  - Another example - <https://projectbeaver.org/resources>
- NPS in NEPA has a CE for removing or moving beavers (wildlife) that have become troublesome.
- Ashley Hom shared in the chat a CO DOT document Beaver Management Along Road Rights of Way.
- DGF Conservation Officers have 3 interventions on private lands before removal but it depends on each warden or ranger. Would be great to have a law enforcement officer join our chat in the future. Stephanie Siemek indicated that her husband will be a Conservation Officer and so could make this connection.
- The 3 northern New Mexico National Forests have an Aquatic Restoration Environmental Assessments that authorizes beaver habitat restoration as well as riparian restoration projects across those forests. BLM is currently producing a similar project, focusing on the Taos Field Office.
- Policy changes in Oregon through the Legislature, focusing on private lands, there is a legislative policy being discussed to provide funding in partnership with ODFW. Likely to be reintroduced next session.

## 2. What are the obstacles to beaver coexistence and relocation?

- 5 mile upriver and downriver policy. This is a policy imposed by DGF.
- Liability of a State conservationist officer telling a land owner to work with a direct organization, what liability is the Department on the hook for?
- Jesse Dubel with NM Wildlife Federation has good contacts with the Conservationist officers.
- A need to create a relocation pool, pre-determined set of locations that can take beaver. Would support the need to act so quickly on relocation. Good example in Washington State – have a Beaver Hotel to hold beaver in Methow Valley.
- SWQB funded through an EPA grant to [create a map of habitat](#), original layers for suitable habitat for beaver – needs to be updated.
  - [Castor Mapper](#) -
- We do not have a holding facility in NM State.

- Relocation can only be done by NMDGF, except on the federal lands exemptions, it would open up opportunities if this was expanded to other organizations
- Refuges have beavers but it usually leads to extermination when they locate in canals or in the riparian areas which or are a danger to Staff.
- We need a Beaver Management Plan/Co-existence Strategy for the state, to identify where they can go and where they would be troublesome.
- Piping water can be a way to alleviate the concerns with beaver being in canals or irrigation ditches.
- Community buy-in is essential for beaver relocation – community planning process could be a way to green light relocation opportunities.

**3. How is New Mexico different than other states with respect to beaver coexistence and relocation?**

**4. Why do we need beaver distribution and habitat mapping tools? What tools are currently available and what is the BRAT model?**

- Defenders is under contract with Utah State University to start a statewide virtual dam inventory that will be finished by the end of this year.
- There is work to update the BRAT model but funding hasn't been secured yet. Models beaver habitat, existing and need for restoration, and the most suitable restoration areas, including modeling of areas whether coexistence may be an issue.

**5. What other mapping tools are developed that could be combined with a BRAT?**

**6. What besides mapping and modeling tools should be developed to further efforts?**

**7. Who are our current legislative leaders on pro-beaver policies?**

**8. Who else should be in this working group? What else should we be considering?**

**Action Steps:**

- Identify highest priority actions. Next meeting: In-Person Beaver Chat?

**NM Beaver Coalition, April 4, 2024 – Working Group C,**

## Education and Outreach, Meeting Notes

Attendees: Karen Menetrey, Nav Khalsa, Toner Mitchell, Ramsey Lofton, Nina Eydelman, Martin Varela, Chantell Victorino, Aidan Manning, Shalyn Bauschlicher, Rose Masters

Discussion: What do we need to educate people on, what different aspects of beavers do we need to reach out about?

There's a public perception that beavers are a nuisance, taking trees down, they're a pest. We need to provide information on the benefits.

Martin: gave some history on the water situation in NM, and the beaver issue in ABQ. Public wanted beaver out, and they were removed from the wild, too.

We need to work with property owners who will be negatively impacted by beavers is needed, to mitigate the impact of beaver works, when a home is in the flood plain.

Reach out to Farmers, ranchers, land owners should be target audience. Also City folks who don't know about beaver benefits. Tie beaver education to the health of the bosque and the Rio Grande.

Help residents with co-beaver habitation techniques, and educate the public.

Mountain communities need to be approached in the right way, sympathetic to farming and ranching, so they feel respected and their knowledge is honored. Remind folks that beavers keep water higher, and keep a more reliable flow through the season. Pond lever devices can mitigate flooding. Beaver dams help with post fire run off- Fire insurance aspect.

We need to meet people where they're at. Beavers do the acequia work. We need to come to these communities with respect for what they know already, not that we're bringing in the education and teaching. We are here on your behalf. We want to help the beaver do the free work we need.

There doesn't need to be an urban vs wild divide. What happens on waterways happens to all of us. Shared ecology

Interest in using beavers to mitigate toxins coming out of landfills. Statewide beaver plan would be voted on and urban folks need the education as well.

Statewide plan didn't get traction because Game and Fish doesn't want it. But we can do things here in the working group regardless.

Audience Focus:

General public

Rural Landowners

Acequia users

Grazing Permittees

- What are the mechanisms and outlets for education/outreach? (Different for different audiences?)

- What resources already exist (nationally, regional)?

NM residents are already tuned in to water issues, which is helpful.

DOW story map- <https://storymaps.arcgis.com/stories/d6e8348568e34526b50345bfd000b53d>

Beaver mapping tool and model beaver habitat, and co-existence fund. DOW Beaver story map- includes funding sources for residents for beaver cohab work. This needs to be funded better, and have outreach so folks know about it. Talking with groups of people is effective. Tying together trout and beaver habitat.

Helping to keep beavers out of acequia ditches is also important. Respect what folks are going through. Meet folks where they are.



Provide funding to help keep beavers in the best place. Some discussion that most traditional land owners don't want beaver, but urban people don't know about beavers.

Reintroduction must be managed correctly.

RGR working on a plan to reintroduce Beavers in Valles Caldera. Habitat restoration, mostly in high county where they won't be a problem for landowners.

- What resources need to be created? Do we need a communication plan about beaver?
- Who else should be at the table?
- Are there local beaver references (specific to New Mexico) that should be updated?

Yes, needs to happen. Karen interested. Nav also. Ramsey- vet tech program pro beaver, beaver Corp, and beaver institute, bring in youth group. Trees New Mexico .org wants to do a Bosque awareness program, beaver info and education with prizes, collaborate with other non-profits, classroom education and field day on a Saturday searching for beaver stuff. Beaversnewmexico@gmail for more info Compile PR materials? Can be shared at events. Who can help?

- How can we collect and share stories about positive beaver experiences?
- How can we enlist local community members as members of the beaver coalition, allies and trusted individuals around beaver outreach? Social science has a role in education and outreach.
- Action Steps:

- o Identify highest priority actions.

- o (Note that April 7th is National Beaver Day)

DISCUSSION: How can we figure out tools for outreach?

In ABQ- community workshops on tree wrapping for families, include education on beaver Bennis, partner with G&F, where biggest issues? Target those communities on education. Target high-conflict communities.

Toner: Outreach suggestion- create an ethos, where we say beavers are not just allowed, but welcomed to communities, and use this as our guiding principle when we go in to communities.

Partnership with Fishing groups? Yes, in progress.

April 7- national beaver day- should we do social media blasts? NM Beaver Project having an event.

ACTION: Everyone who can, will. Some govt. agencies not able to due to controversy.

Gather resources- websites, workshops, flyers, partnerships

ACTION: Create an Ethos- Beavers should be welcomed, we're connected in spirit, acknowledge traditional knowledge, approach people with sympathy.

**Other thoughts on education from others not in our group:**

Support Game and Fish- give them info on non-lethal options, put together education materials for game and fish so there starts to be consistency.

Elk grazing education on public and private grounds

What is the BRAT?

NM needs a relocation area- beaver hotel

AMNM work with G & Fish to create a landowner guide for beaver

NRCS- ranchers work with this org. Is someone from that group in our coalition? No. They have a Best Management Practices, should include beavers!

Beaver relocation hit list- where can they go? RGR working on this with the Valles Caldera, G&F receptive, but we need more places.

File sharing system?

June 13 next meeting



# MEMORANDUM

## DEPARTMENT OF GAME AND FISH

### Beaver Relocation Guidelines

This memo outlines protocols that Department staff, state or federal agencies, or private landowners must follow when proposing a beaver relocation project. The process to review and approve potential relocation projects can be lengthy. Department staff receiving inquiries from another agency (local, state, federal) or a private landowner should refer them to the guidelines below. All proposals for a beaver relocation project will be coordinated through the Carnivore and Small Mammal Program Manager (Program Manager; contact information below). Questions about the process should be directed to the Program Manager.

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#### *Releasing Beaver on a Property*

Landowners or land management agencies interested in having beavers relocated TO their property should contact the Program Manager to initiate the process. Interested parties will be required to provide the necessary information, forms, and access to the property as described below. Following receipt of the necessary information, forms and assessments, the Department will determine the best source population from which to relocate beavers, including assessment for disease or invasive species transmission potential. Additionally, relocated beavers must have time to establish a food cache before winter. Thus, relocations will only be conducted from May through October.

If a landowner or land management agency is seeking to bring beavers to their property, information they will be required to provide includes:

1. The location of the property, a map showing potential release sites, and a map showing ownership of the properties within the release area (described below)
2. Written consent and permission (see Beaver Reintroduction Consent Form) from ALL landowners, land management agencies and other potentially affected parties within the proposed release area, as described below:
  - a. Five (5) stream miles upstream and five (5) stream miles downstream from the release site (a 10 mile reach)
  - b. Up any tributary streams within the ten mile reach, to a total distance of five (5) stream miles from the release site
  - c. 100 meters out from each stream bank
3. Description of the release site conditions, including but not limited to: seasonal persistence of the water source, riparian vegetation conditions, and any knowledge of past and/or current beaver occurrence in the vicinity.

Landowners must allow a representative of the Department to access the property for a habitat/site assessment to determine if the area can support beaver and provide a reasonable chance of long-term relocation success. The Beaver Reintroduction Consent form with all required signatures can be submitted after the site assessment. A number of factors may impact the timing or ultimate completion of a release, including but not limited to: availability of a source population of beavers, constraints on capture, logistical constraints on transport to the release site, and weather.

## *Removing Beaver from a Property*

Landowners or land management agencies seeking to have beavers removed from their property (i.e. to be a source for relocations) must recognize that there may not be available approved relocation sites, and that priority is given to moving beavers from active wildlife damage complaints. If the issue relates to a wildlife damage complaint or otherwise requires immediate resolution, contact the local District Wildlife Officer or the regional Private Land Specialist (contact information below). If a landowner or land management agency is amenable to waiting to have beavers removed, they must provide the following information:

1. A description of the issue to be resolved, the need to consider relocation, and an explanation of how the project resolves the concerns of all parties involved
2. Written permission from the landowner(s) where trapping will occur
3. The estimated number of beavers which will be trapped and relocated
4. The dates when trapping and relocation will occur
5. A list of trappers or individuals that will be trapping, handling and relocating beavers
  - a. The credentials and experience of these individuals
6. A description of the equipment which will be used to trap and transport beavers
  - a. Beavers may not be held and must be transported to the release site immediately

It is illegal to transport wildlife, including beaver, without a permit. Any individual relocating beavers must be authorized by the Department to do so.

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Submitting a request does not guarantee a project will be approved. Projects may be rejected for many reasons including biological (e.g., feasibility of project success, animal survival) and depredation concerns (e.g., proposed release sites may lead to wildlife damage complaints). If a proposal is approved, a Nuisance Wildlife Assistance permit will be issued through the Department's Special Permits Program.

### Department Contact Information:

- Carnivore and Small Mammal Program Manager
  - Information regarding the relocation coordination or submission of required information
  - Information regarding release area identification or delineation
  - (505) 476-8041
- Private Land Specialist Supervisor
  - Wildlife damage complaints
  - (505) 222-4721
- Wildlife Management Division (main line)
  - (505) 476-8038



# Site Assessment for Beaver Relocation

Date: \_\_\_\_\_

Evaluator(s): \_\_\_\_\_

Name of Water Body: \_\_\_\_\_

Nearest Town: \_\_\_\_\_

GMU: \_\_\_\_\_

UTM Coordinates: \_\_\_\_\_

Land Ownership/Contact Info: \_\_\_\_\_

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	YES	NO
1. Permanent source of water available		
2. Slow moving, relatively low gradient watercourse (<15%)		
3. Stream order between 2nd and 4th		
4. Preferred food species abundant at site: willow/aspen/cottonwood/alder, etc.		
5. Foraging distance from waters edge: adjacent or no further than 30m (98ft)		
6. Min. amount of contiguous habitat available is at least .25 stream mi		
7. Current beaver sign is absent at this site		
8. Relocation area is not adjacent to roads or culverts		
9. Relo-Site meets Land Ownership Criteria: Minimum of 10 stream mi. and the same property ownership from bank to bank.		
10. Photos or video documentation taken and submitted for assessment?		
11. Based upon the above criteria, is this site suitable for reintroduction?		
12. If so, for how many beavers (including young)?	beavers	

13. Evaluator Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\*\*\* Final Review and Approval Required from WMD \*\*\*

Assessment based upon Habitat Suitability Index Models



## BEAVER REINTRODUCTION CONSENT FORM

### LANDOWNER

I \_\_\_\_\_ have requested that beavers be relocated  
(please print)  
by the New Mexico Department of Game and Fish onto my private property located at: \_\_\_\_\_  
\_\_\_\_\_ and I agree not to file a wildlife  
complaint in response to the relocated beavers. I am aware that beavers may choose to abandon the relocation site  
and have the potential to cause both positive ecological affects, as well as significant property damage. I release the  
Department from any and all liability as a result of the relocated beavers.

**Address:** \_\_\_\_\_ **Telephone:** \_\_\_\_\_

\_\_\_\_\_

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

### NEIGHBORING PROPERTY

I am aware that the New Mexico Department of Game and Fish will be relocating beaver(s) onto the neighboring  
property of : \_\_\_\_\_ and I agree not to file any wildlife complaints in response to the  
relocated beavers. I am aware that beavers may choose to abandon the relocation site and have the potential to cause  
both positive ecological affects, as well as significant property damage. I release the Department from any and all  
liability as a result of the relocated beavers.

**Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_ **Telephone:** \_\_\_\_\_

\_\_\_\_\_

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

### NEIGHBORING PROPERTY

I am aware that the New Mexico Department of Game and Fish will be relocating beaver(s) onto the neighboring  
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relocated beavers. I am aware that beavers may choose to abandon the relocation site and have the potential to  
cause both positive ecological affects, as well as significant property damage. I release the Department from any  
and all liability as a result of the relocated beavers.

**Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_ **Telephone:** \_\_\_\_\_

\_\_\_\_\_

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_