



# Rare Plant Symposium US Fish and Wildlife Service Update

September 18, 2020

# Threatened and Endangered Plant Species in Colorado

<a href="#">Eriogonum pelinophilum</a>	Clay-Loving wild buckwheat	Endangered
<a href="#">Sclerocactus glaucus</a>	Colorado hookless Cactus	Threatened
<a href="#">Phacelia submutica</a>	DeBeque phacelia	Threatened
<a href="#">Lesquerella congesta</a>	Dudley Bluffs bladderpod	Threatened
<a href="#">Physaria obcordata</a>	Dudley Bluffs twinpod	Threatened
<a href="#">Pediocactus knowltonii</a>	Knowlton's cactus*	Endangered
<a href="#">Astragalus humillimus</a>	Mancos milk-vetch*	Endangered
<a href="#">Sclerocactus mesae-verdae</a>	Mesa Verde cactus*	Threatened
<a href="#">Phacelia formosula</a>	North Park phacelia	Endangered
<a href="#">Astragalus osterhoutii</a>	Osterhout milkvetch	Endangered
<a href="#">Ipomopsis polyantha</a>	Pagosa skyrocket	Endangered
<a href="#">Penstemon debilis</a>	Parachute beardtongue	Threatened
<a href="#">Eutrema penlandii</a>	Penland alpine fen mustard	Threatened
<a href="#">Penstemon penlandii</a>	Penland beardtongue	Endangered
<a href="#">Spiranthes diluvialis</a>	Ute ladies'-tresses	Threatened
<a href="#">Platanthera praeclara</a>	Western prairie fringed Orchid*	Threatened

- 16 Listed Species
- 9 Threatened
- 7 Endangered

\* Species lead is a state other than Colorado



# What Has the FWS Been Doing?

- Species Status Assessment (SSA)
  - Species Ecology
  - Current Condition
  - Future Condition
  - A single source for species' biological information needed for all Service ESA decisions (listing, permitting, HCPs, recovery planning)
  - 2020: 2 SSAs in surname, 4 in progress, 3 starting soon

Surname	In Progress	Upcoming
Parachute beardtongue	Clay loving wild buckwheat	Kremmling milkvetch
Pagosa skyrocket	North Park phacelia	Kremmling beardtongue
	Colorado hookless cactus	
	DeBeque phacelia	



# What Has the FWS Been Doing?

- Draft Recovery Plans
  - Objective, measurable criteria biologically necessary for recovery
  - Site-specific management actions
  - Estimates of time and cost
  - 2020: 2 published, 2 in surname, 2 starting soon

Published	In Progress	Upcoming
Dudley Bluffs bladderpod	Parachute beardtongue	Colorado hookless cactus
Dudley Bluffs twinpod	Pagosa skyrocket	DeBeque phacelia





# What Has the FWS Been Doing?

- 5-year reviews
  - Review for change in listing status
  - 2020: 3 published - no change in status, 5 by 2021

Published	Upcoming
Dudley Bluffs bladderpod	Pagosa skyrocket
Dudley Bluffs twinpod	Clay-loving wild buckwheat
Parachute beardtongue	North Park phacelia
	Colorado hookless cactus
	DeBeque phacelia



# Other Happenings

- Chapin Mesa milkvetch
  - Proposed listing as threatened – September 17<sup>th</sup>
  - Proposed critical habitat of 3,635 acres
  - 60 day comment period
  
- Boat-shaped bugseed
  - Waiting on genetic results



# Information for Planning and Consultation (IPaC)



## Area of Influence

The areas of influence for **6** plants have been updated in FY20.



## IPaC

Information in IPaC has been updated for **3** species in FY20 with **4** additional species in progress. A total of **8** species are functional in IPaC.



# Information for Planning and Consultation (IPaC)

## Area of Influence Updates

Clay-loving Wild Buckwheat		 in progress with SSA
Colorado Hookless Cactus		 in progress with SSA
DeBeque Phacelia		 in progress with SSA
Dudley Bluffs Bladderpod		
Dudley Bluffs Twinpod		
North Park Phacelia		
Osterhout Milkvetch		
Pagosa Skyrocket		
Parachute Beardtongue		
Penland Alpine Fen Mustard		
Penland Beardtongue		

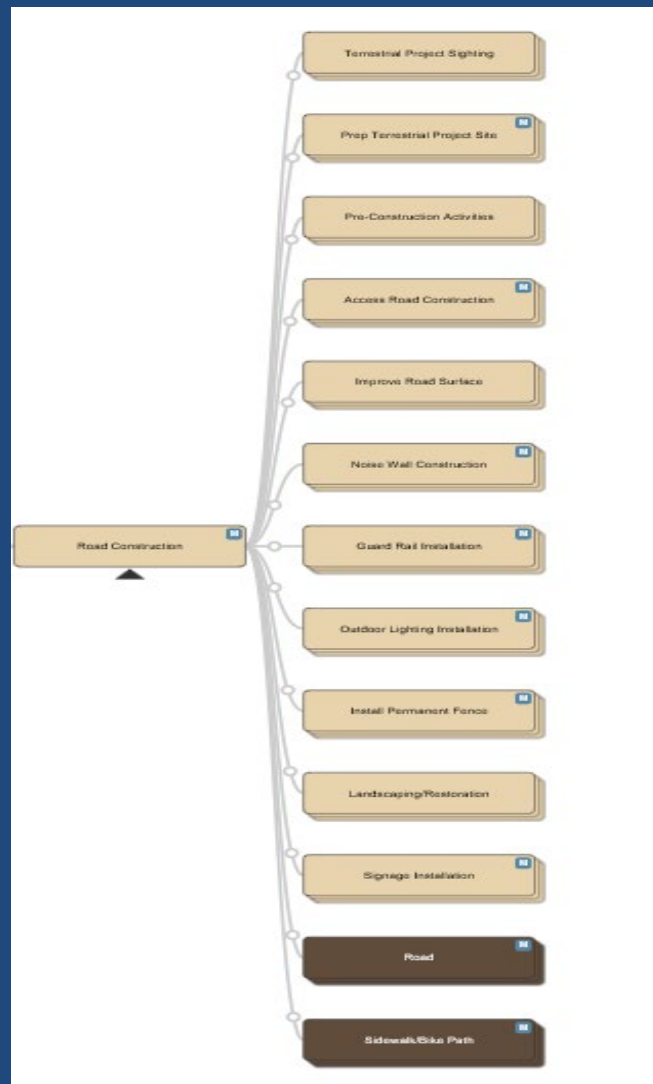


# IPaC Effects Pathway Manager

- A way to deliver impact analyses and conservation measures to project proponents
- Breaks larger activities into smaller bite-sized pieces
- Addresses possible impacts of actions
- Recommends conservation measures
- Additional information
- Species survey guidelines
- Habitat assessment guidelines
- Project design guidelines (general conservation measures)



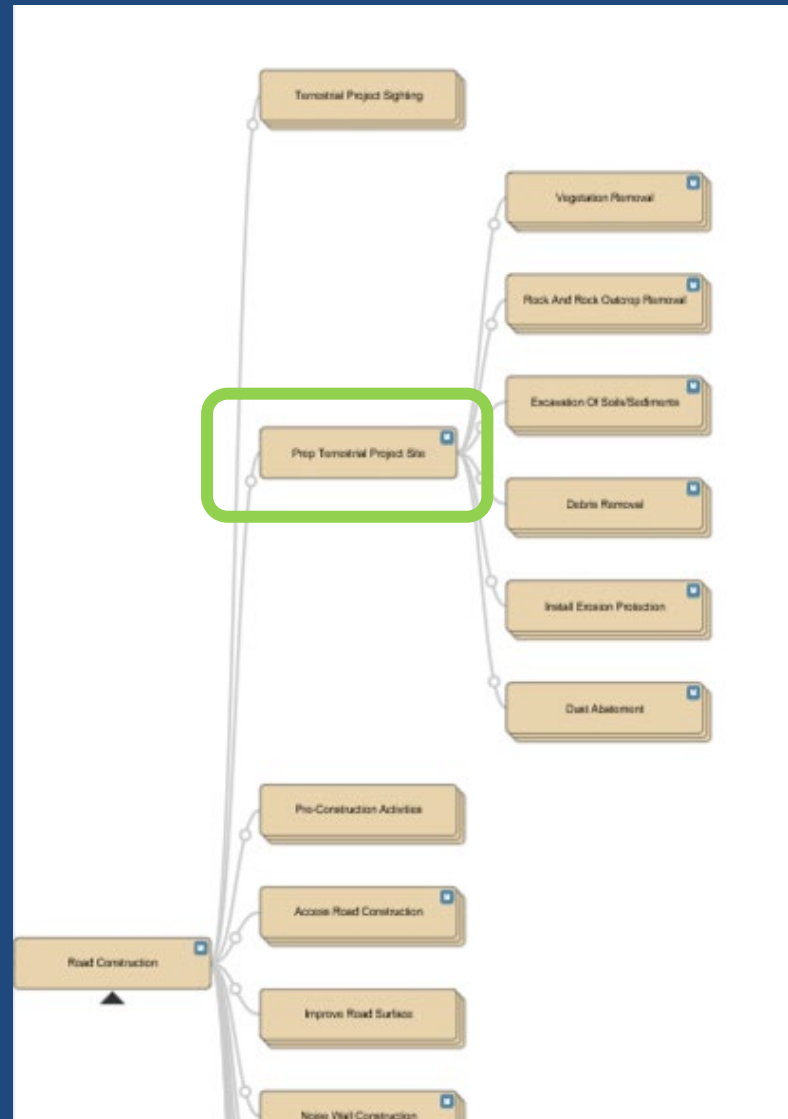
# Behind the Scenes: Effects Pathway Manager



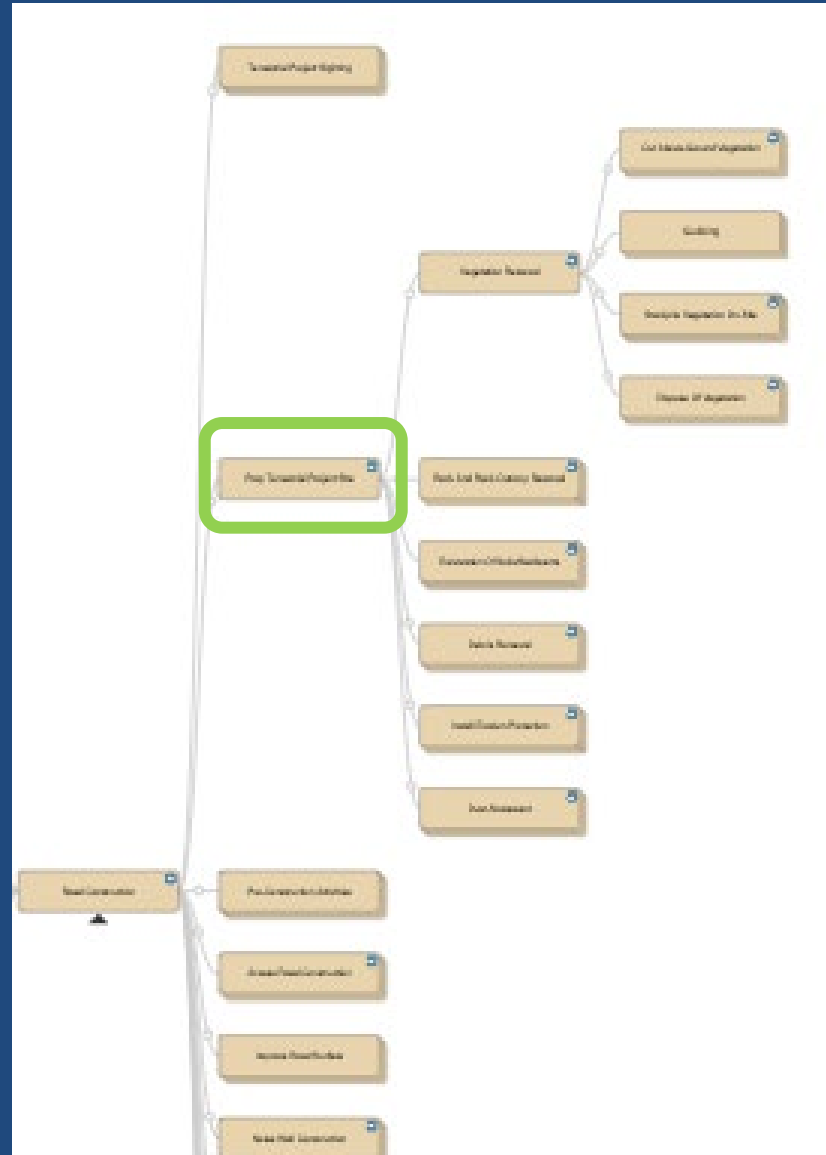
# Behind the Scenes: Effects Pathway Manager



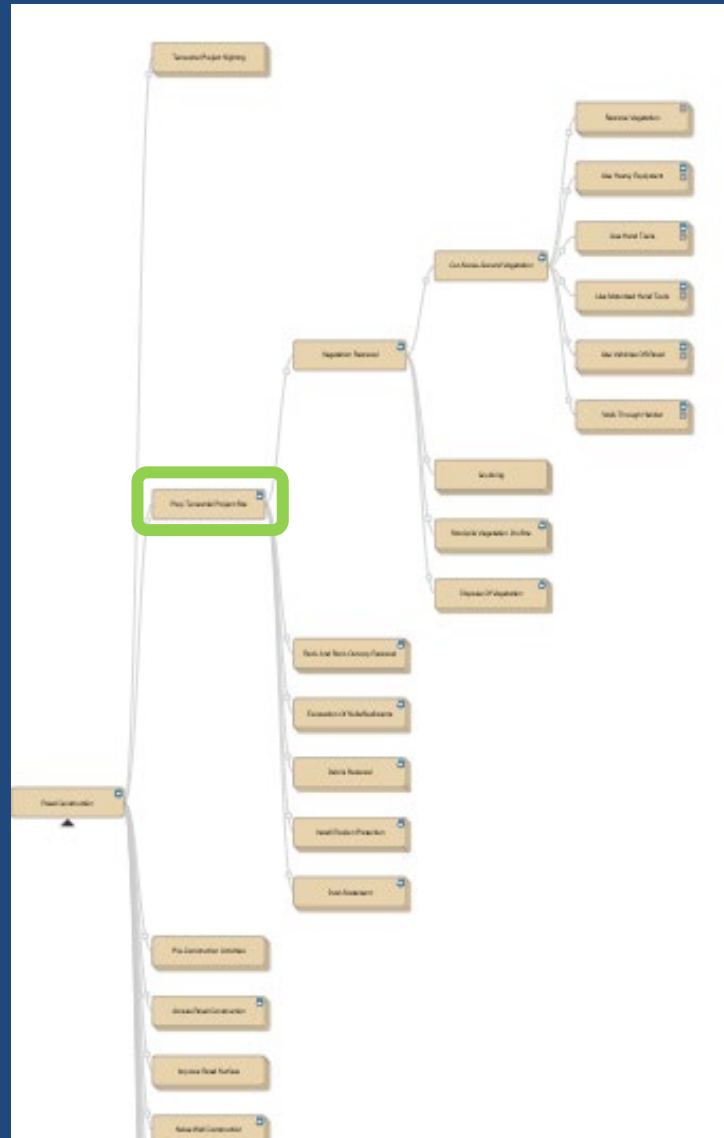
# Behind the Scenes: Effects Pathway Manager



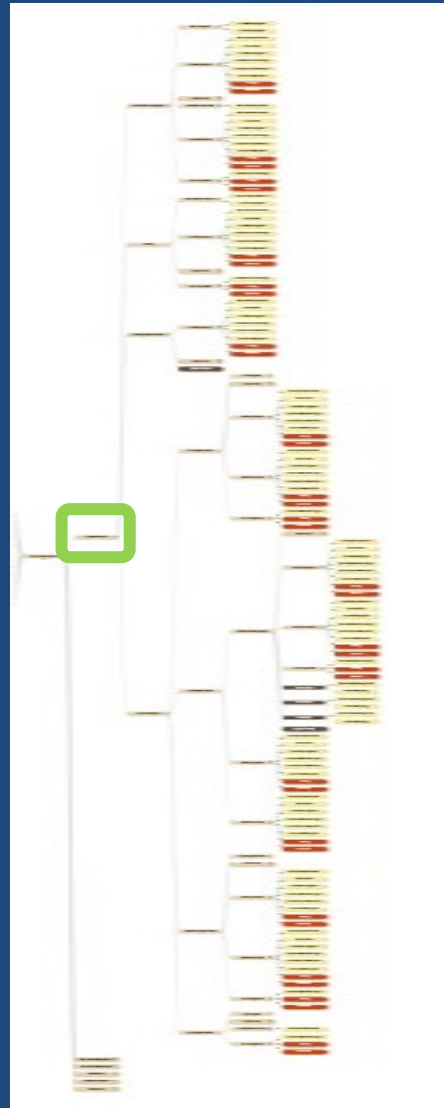
# Behind the Scenes: Effects Pathway Manager



# Behind the Scenes: Effects Pathway Manager



# Behind the Scenes: Effects Pathway Manager





# Behind the Scenes: Effects Pathway Manager



# Behind the Scenes: Effects Pathway Manager



# Behind the Scenes: Effects Pathway Manager

Prep Terrestrial Project Site

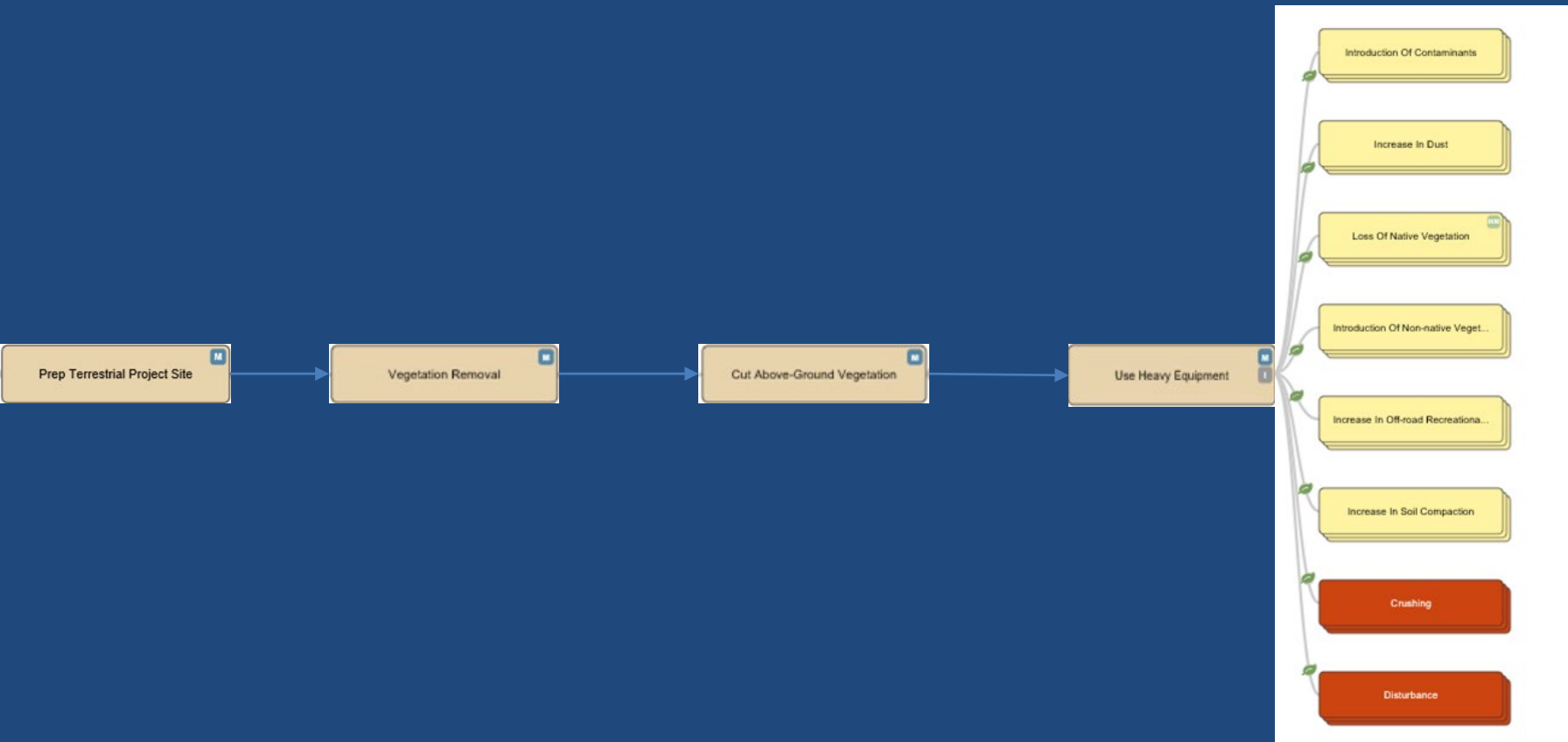
Vegetation Removal

Cut Above-Ground Vegetation

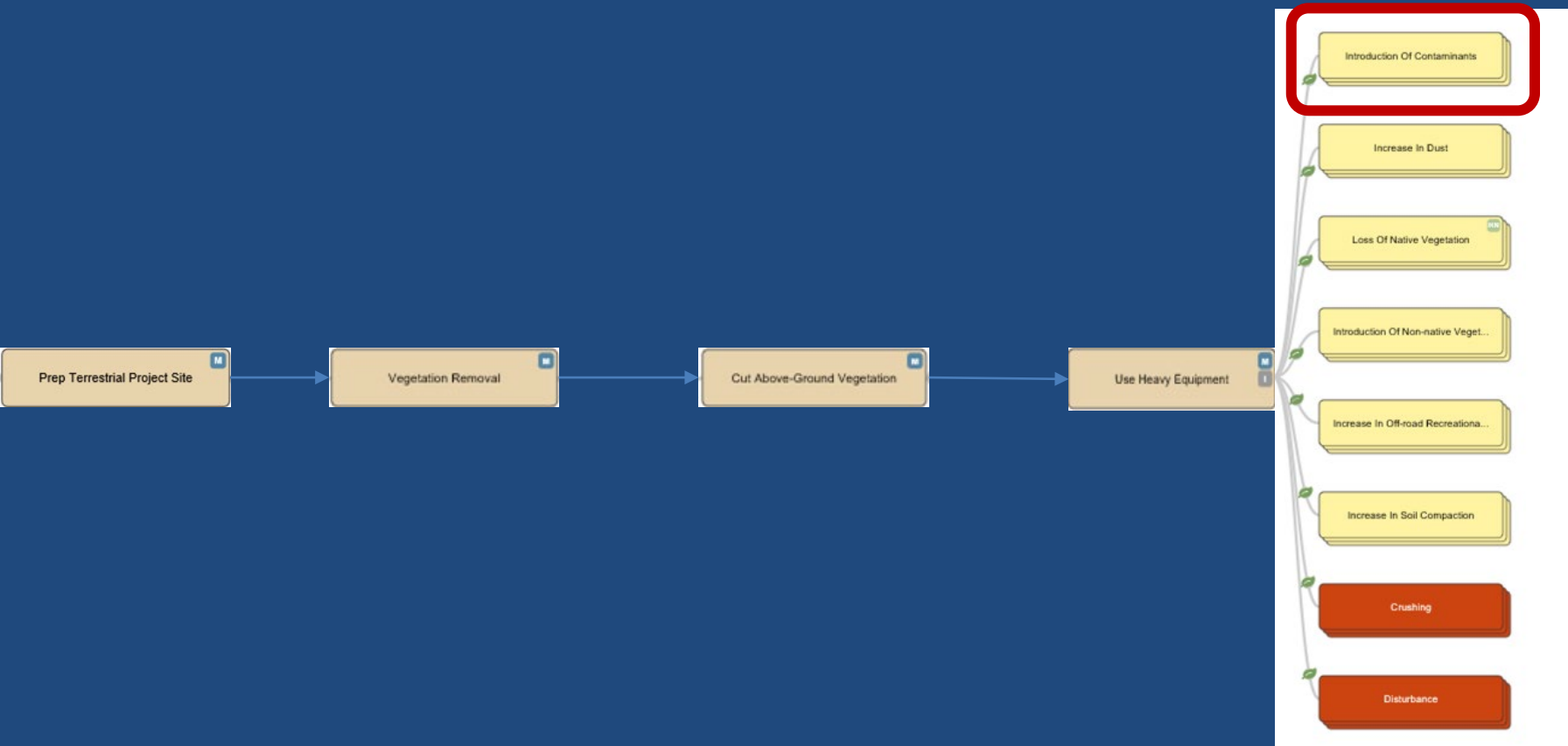
Use Heavy Equipment



# Behind the Scenes: Effects Pathway Manager



# Behind the Scenes: Effects Pathway Manager




























# Information for Planning and Consultation (IPaC)

## IPaC Updates

Clay-loving Wild Buckwheat		 in IPaC, update FY21
Colorado Hookless Cactus		
DeBeque Phacelia		
Dudley Bluffs Bladderpod		
Dudley Bluffs Twinpod		 in IPaC, update FY21
North Park Phacelia		
Osterhout Milkvetch		
Pagosa Skyrocket		 in IPaC, update FY21
Parachute Beardtongue		
Penland Alpine Fen Mustard		 in IPaC, update FY21
Penland Beardtongue		





# Questions?

Aimee Crittendon  
[aimee\\_Crittendon@fws.gov](mailto:aimee_Crittendon@fws.gov)

[ecos.fws.gov/ipac](https://ecos.fws.gov/ipac)



# What Has the FWS Been Doing?

- Parachute beardtongue
  - SSA in surname
  - Draft recovery name in surname
  - 5-year review was published in 2020 – no change in status
- Pagosa skyrocket
  - SSA in surname
  - Draft recovery name in surname
  - 5-year review by 2022



# What Has the FWS Been Doing?

- Clay-loving wild buckwheat
  - SSA kickoff September 17<sup>th</sup>, complete by August 2021
  - 5-year review by 2021
- North Park phacelia
  - SSA very nearly complete
  - 5-year review by early 2021



# What Has the FWS Been Doing?

- Colorado hookless cactus
  - SSA in progress, complete by March 2021
  - 5-year review by 2021
  - Draft recovery plan 2021, final 2022
- DeBeque phacelia
  - SSA in progress, complete by March 2021
  - 5-year review by 2021
  - Draft recovery plan 2021, final 2022



# What Has the FWS Been Doing?

- Dudley Bluffs bladderpod and twinpod
  - 5-year review – no change in status
  - Final recovery plan
- Kremmling milkvetch and Kremmling beardtongue (Osterhout milkvetch and Penland beardtongue)
  - SSA starting soon, likely around the end of November

