

2021 Ag Lender Meetings

Colorado Drought Advisors + Drought Planning

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**AGRICULTURE AND
BUSINESS MANAGEMENT**
COLORADO STATE UNIVERSITY
EXTENSION



LIVESTOCK AND RANGE
COLORADO STATE UNIVERSITY
EXTENSION

I-70 through Glenwood Canyon remains closed by flash flood watch, weather shifts

Jessica Snouwaert jessica.snouwaert@gazette.com Aug 19, 2021 Updated Oct 6, 2021 View Comments



For first time in 8 years, 100% of Colorado is under drought or abnormally dry conditions

Federal designation is consistent with wider transformation of Southwest amid climate change



**Hoping for rain
is not a drought strategy**





Colorado Drought Advisors

Connecting producers with
financial, educational, and
institutional resources.



History of Drought Advisors

- One-on-one contacts
 - About 20 intakes
- Webinars
 - Reached 400 people via 6 webinars
- Social Media
- Speakers / Representatives – sources of educational information
- Press Releases
- Partnerships within the group, drought things all for drought advisor
- Intake forms, phone calls
 - Prompt questions and guidelines for working through what a producer needed in terms of resources and education
- Provide resources and advise to get to the point of creating a Drought Plan

Our Audience

- Primary Audience
 - Farmers
 - Ranchers
 - Land lessee's
- Secondary Audience
 - Ag Professionals
 - Service Providers to Primary Audience
 - Water Professionals
 - General Public

Future of Drought Advisors

- Thanks to the funding of CDA and DNR we have money available to hire/support:
 - Website coordinator
 - Full time program coordinator
 - We will hire our intern to fulfill this role
 - Development of mission/vision/goals for longevity of Drought Advisors
 - Incentive program for producers to receive funds for developing a drought plan
- All to help create a long term program centered around drought resiliency

Mission

To build short and long-term resilience for drought among Colorado Producers by working with farmers and ranchers to connect resources, identify/assess risk, and implement practices that lessen the impact of drought.

Vision

To remove barriers,
provide and implement
strategies to cope with
drought by extending
expertise to operations
on an individual basis
by acting as a network
to ensure needs are met
via a holistic approach
and multiple access
points.

Goals

1. Pair drought professionals with those experiencing drought
2. Reduce the cost of professional services to increase resiliency or drought planning
3. Build a network of producers and professionals alike centered around drought tolerance

Media Kit Final Draft #1



Media Kit Final Draft #2



DROUGHT ADVISORS COMMITTEES

ADVOCACY

OUTREACH

RESEARCH

TRAIN THE TRAINER

Increasing drought resilience of Colorado Agricultural Producers

SEP 2021

OCT 2021

MAR 2022

DEC 2021

AUG 2022



Program planning
and set up.



Drought Advisors
Outreach



East and West
Slope Training



Start Seven Part
Webinar Series



Project wrap up and
future planning

DROUGHT ASSISTANCE PROGRAM

Providing direct and focused support for Colorado Producers

MAY 2022



Program planning
and set up.

JAN 2023



Start project
execution.

NOV 2023



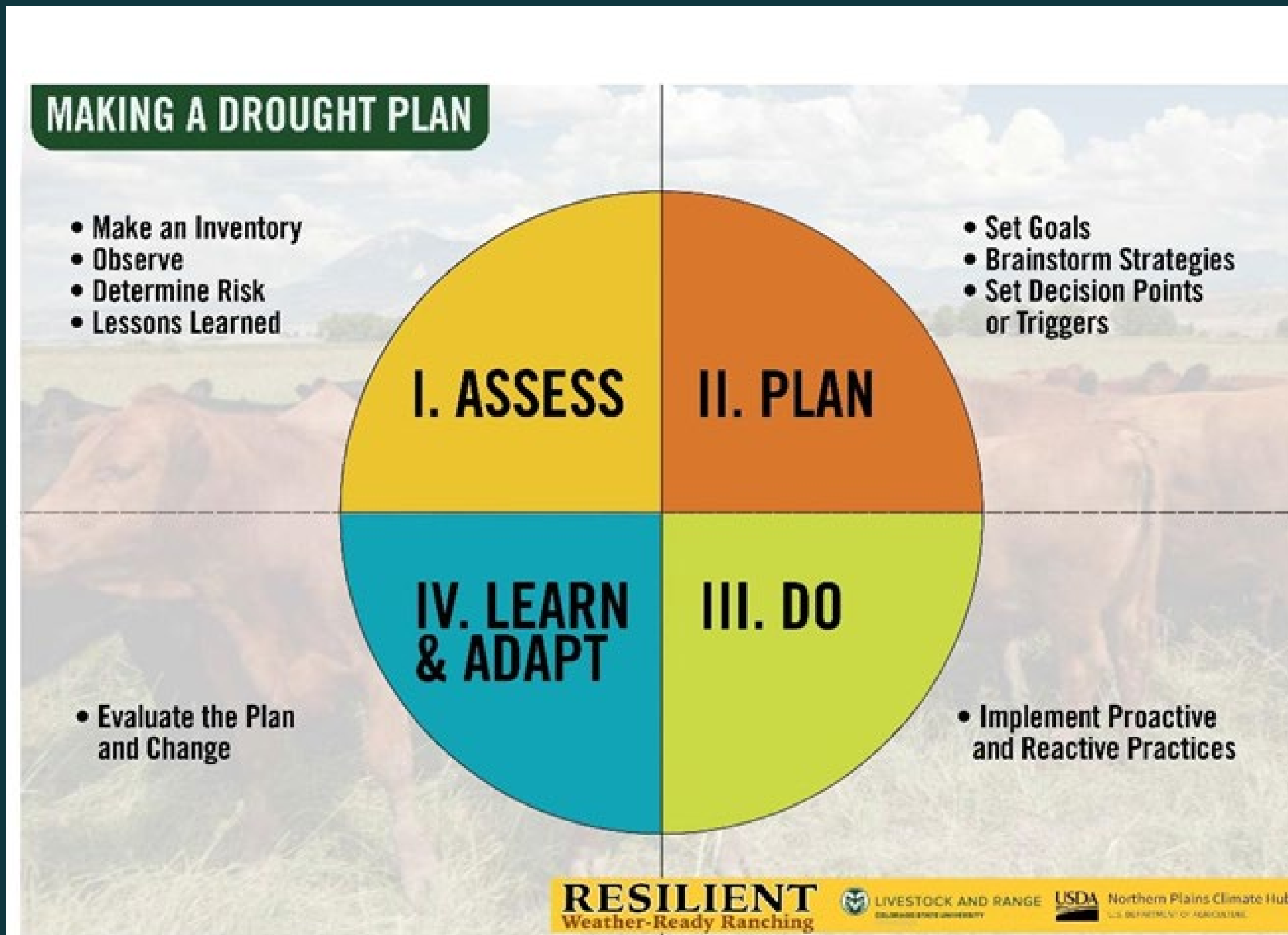
Program midpoint
and check in.

SEP 2024



Project wrap up
and reporting.

How does this fit into our mission?



2002

2003

223 lb / acre

1338 lb / acre

2004

758 lb / acre

1250 lb / acre

2005

Being adaptable allows you to thrive
in highly **variable** environments.

RESILIENT
Weather-Ready Ranching



LIVESTOCK AND RANGE
COLORADO STATE UNIVERSITY



Northern Plains Climate Hub
U.S. DEPARTMENT OF AGRICULTURE

What are the elements
of a drought
contingency plan?

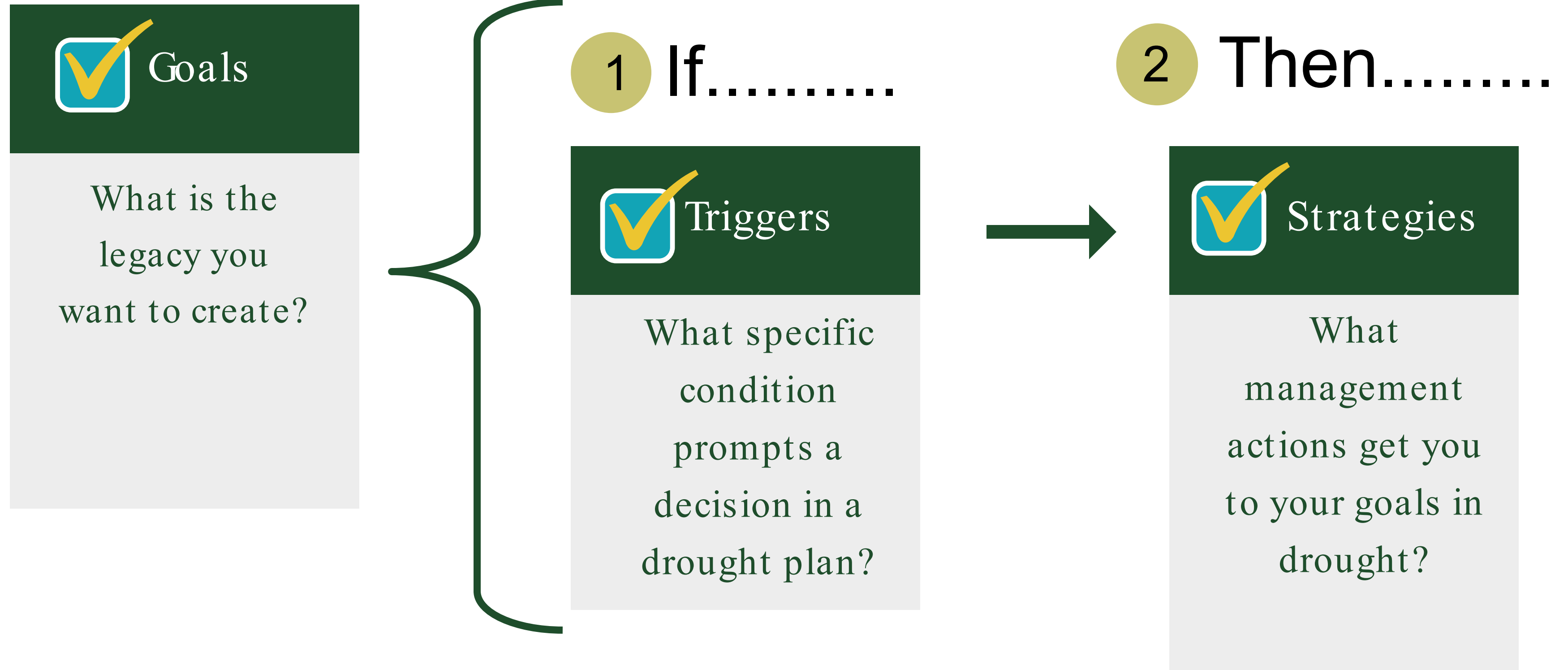
1 If.....

2 Then.....



Heavily stocked pasture at the Central Plains Experimental Range, 1956
Credit: USDA -ARS

Elements of a Drought Contingency Plan



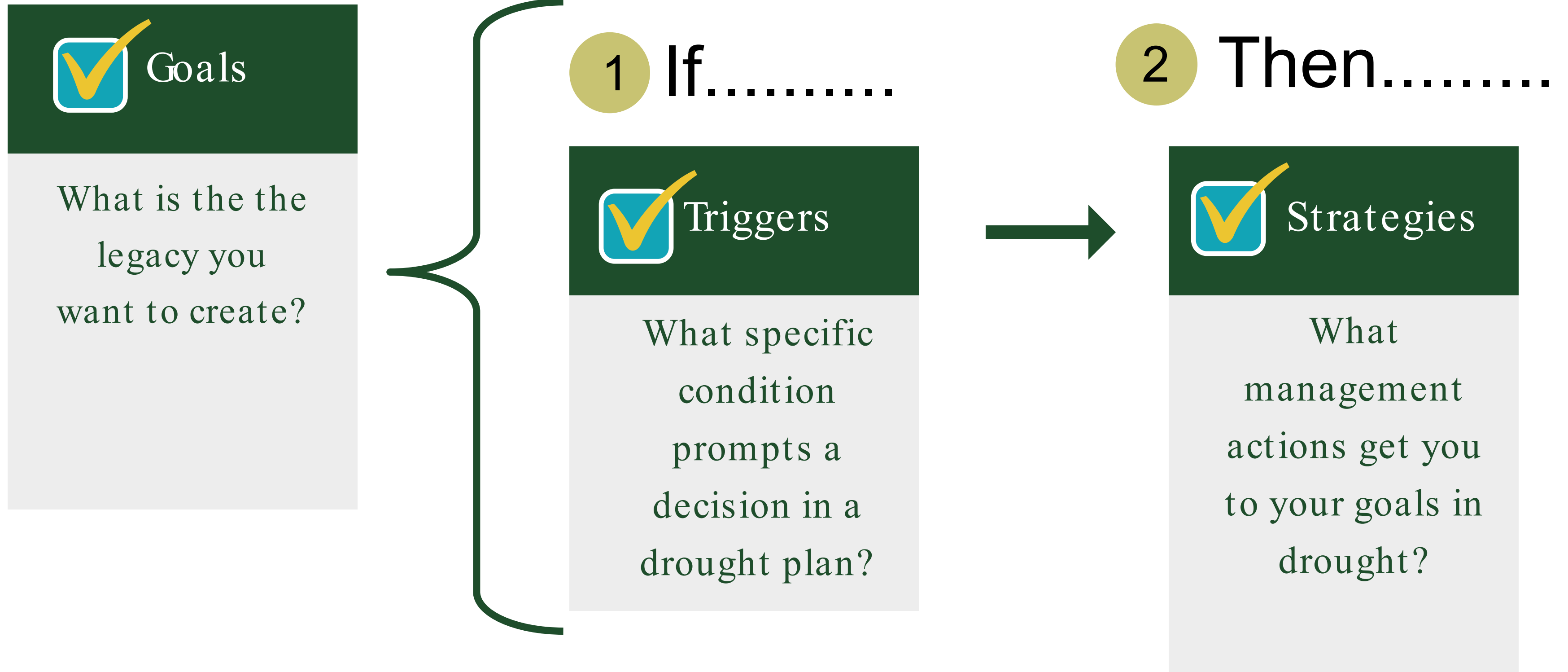


Setting a Goal

What is the legacy you want
to create?

(As a business person, land steward,
family and community member?)

Elements of a Drought Contingency Plan



A **trigger** is a point at which monitoring information prompts a specific decision within a drought plan.

Before a drought, decide what indicators ...

[precipitation amounts
range condition
projected cattle prices]

... you can use to set a reasonable point for making a decision (trigger), even though you don't know what's ahead.





Triggers

An Example from a Nebraska Ranch

01 If they know...

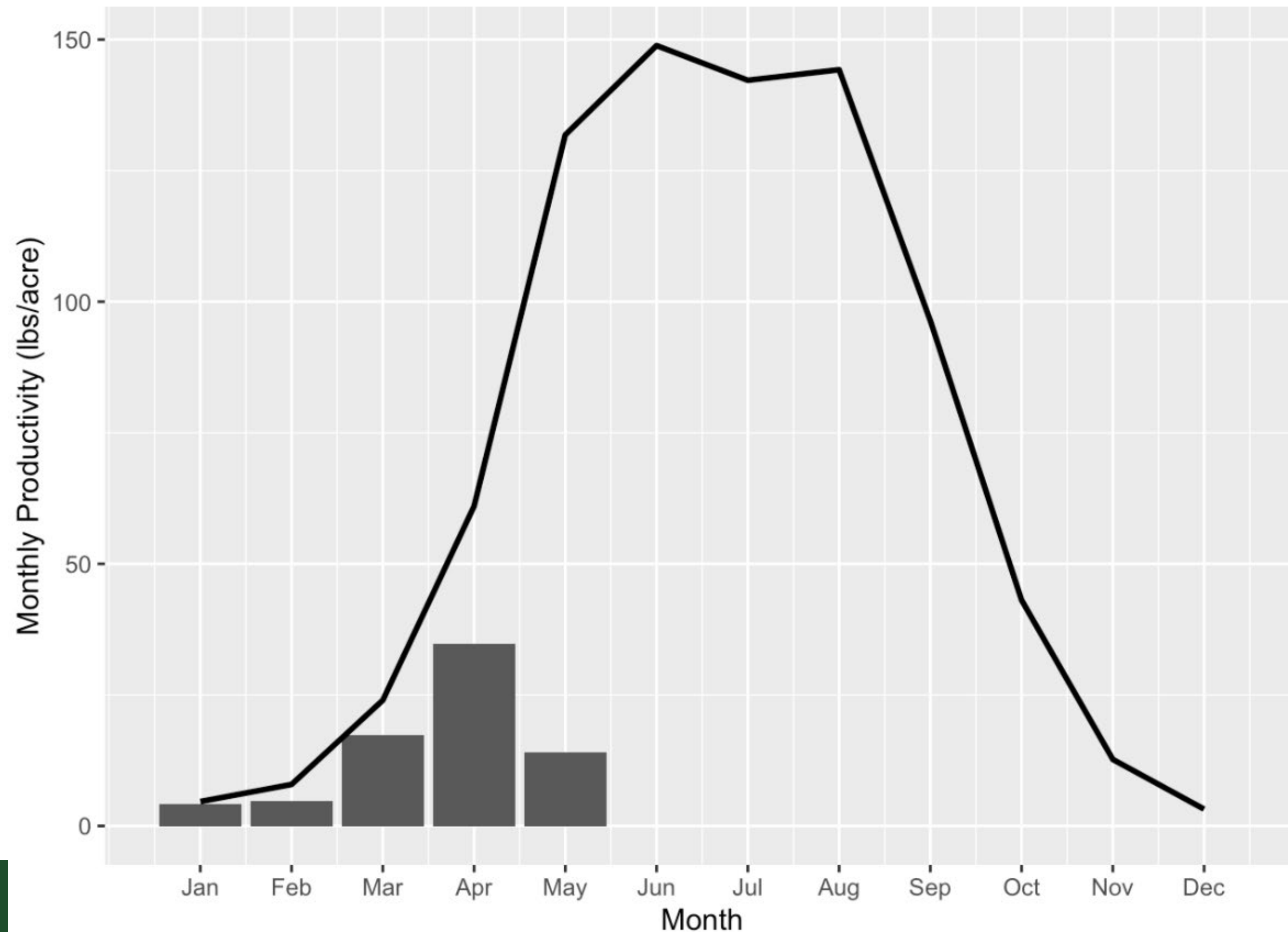
- About 1/2 the annual forage is produced by June 15th
- 75% (15.75") of the annual average rainfall is received between November 1 & June 15th,

02 Then...

If the rainfall is <80% (12.60") of the 75% (15.75") then the stocking rate should be decreased 30% by weight

Where are you relative to 'average'?

Average Monthly ANPP

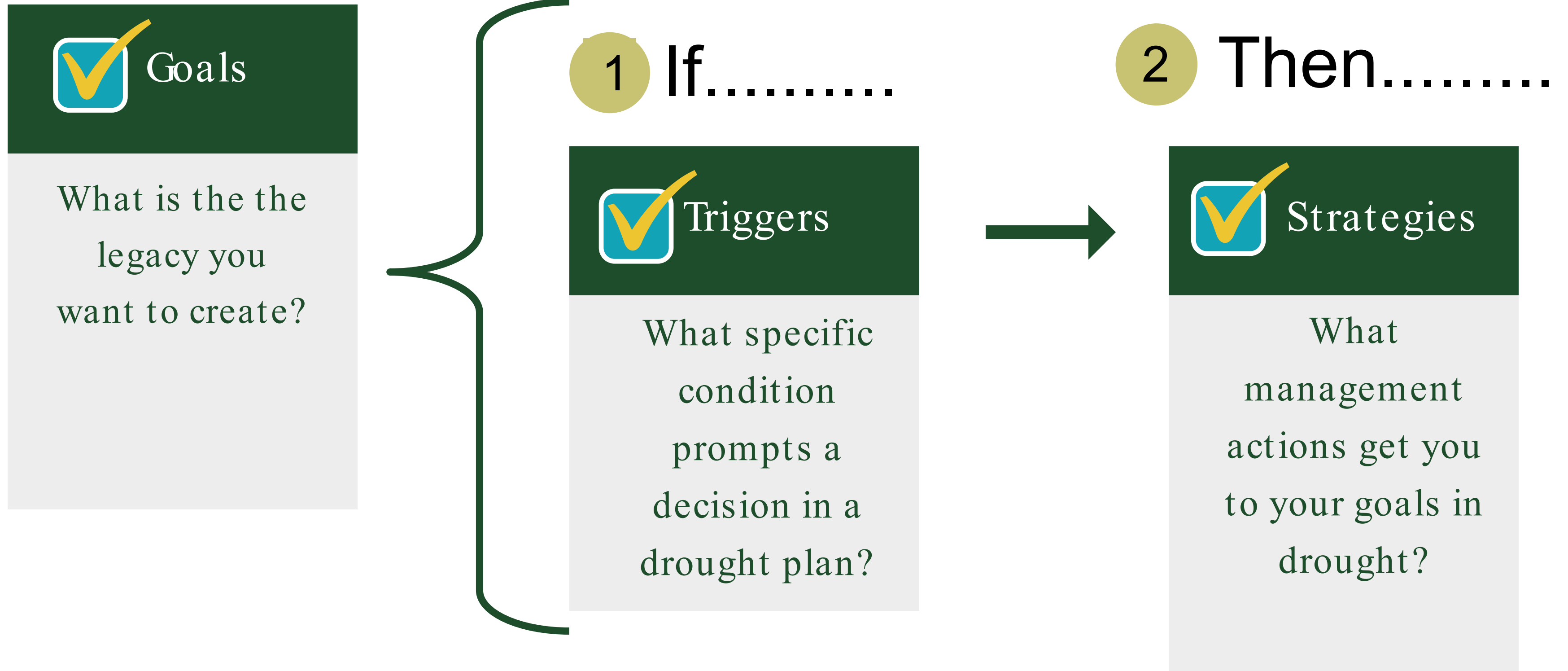


From: https://hensen.shinyapps.io/csu_rangecc/



Triggers are
different for every
operation, it's just
important to have
them!

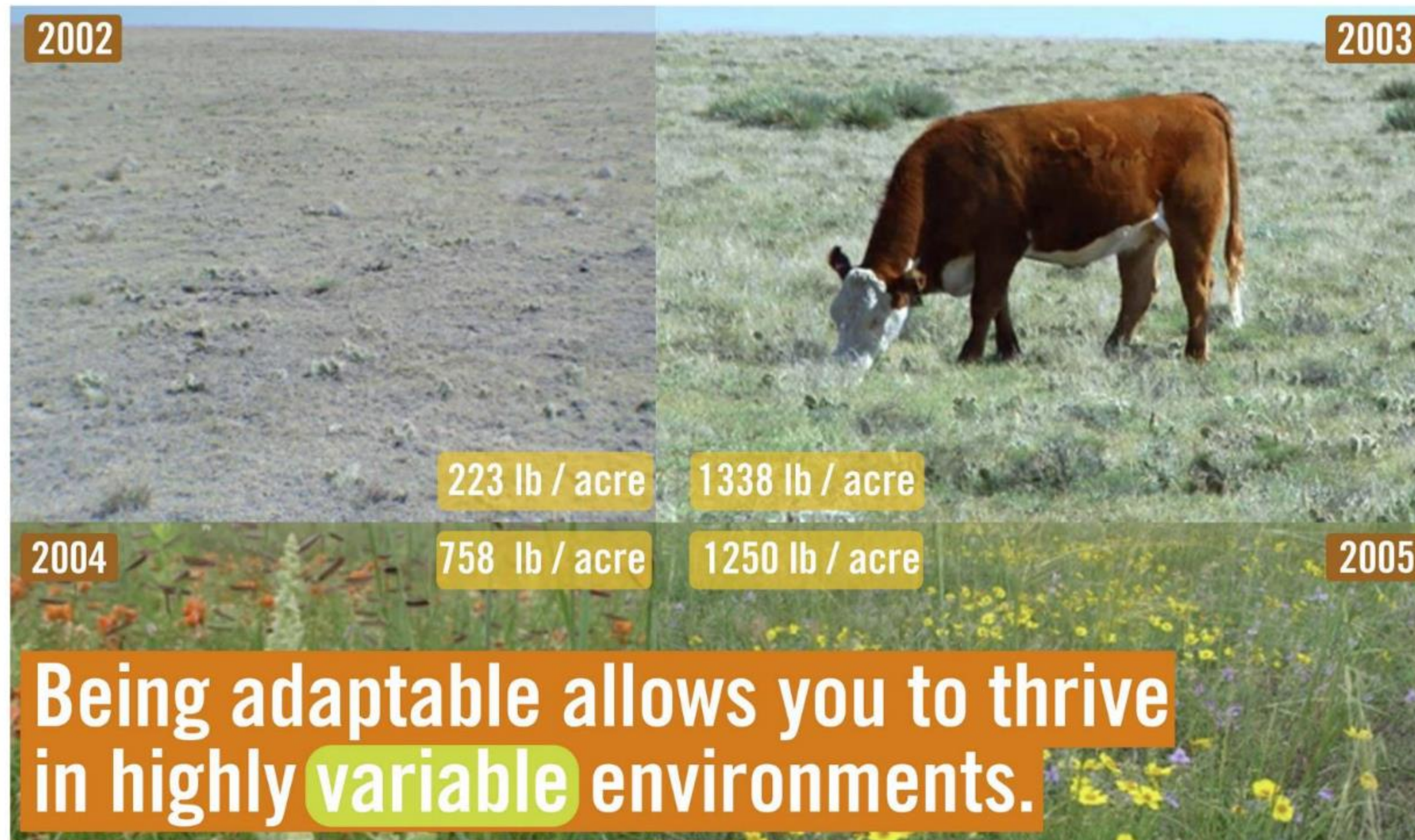
Elements of a Drought Contingency Plan





Chronic overuse can result in
long-term productivity declines
and reduce drought resilience

Do you know your supply relative to demand?



Evaluate Cost Trade - Offs



Should I Buy Hay or Sell Cows?

by: Jeffrey E. Tranel, Agricultural & Business Management Economist, jtranel@colostate.edu

Stephen R. Koontz, Associate Professor and ABM Economist, stephen.koontz@colostate.edu



This 'decision aid' is designed to help cow-calf producers determine whether it is financial better to sell beef cows now or retain ownership given "high" feed prices. It is a guide only. Producers should consult with their lenders, tax practioners, and/or other professional before making any final decisions. More information and other decision tools are available at www.coopext.colostate.edu/ABM/.

What is the current year?

2012

Annual "cow costs" this year? (\$/cow)

650

Number of cows in herd?

500

Non-feed costs this

Typical conception rate?

95%

year? (\$/cow)

300

Typical weaning rate?

95%

Annual percentage change in non-feed costs?

3%

Average Weaning Weights

Steers (lbs per head)

560

Heifers (lbs per head)

515

Estimated Future Prices:

500-550 lb Steers (\$/lb)

Alfalfa Hay (\$/ton)

Market Value of Cows (\$/cow)

Hay To Be Fed:

2012	2013	2014	2015	2016
1.49	1.60	1.75	1.55	1.60
300	350	225	225	225
1,100	900	1,500	1,800	2,000

INFORMATION PER COW IN THE HERD (\$/cow)

	2012	2013	2014	2015	2016
Revenues	705	758	830	734	758
Expenses					
Non-feed costs	300	309	318	328	338
Hay costs	450	1,050	338	338	338
Pre-Tax Profits	(45)	(601)	175	68	83
Accumulated Profits	(45)	(647)	(472)	(404)	(321)
Salvage Value of Cow	1,100	900	1,500	1,800	2,000
Value of Cow Kept in Herd	779	624	1,825	1,951	2,083
Annual Speculative Profit	(321)	(276)	325	151	83
Accumulated Speculative Profit	(321)	(597)	(271)	(121)	(38)
If Cow & Calf Sold Each Year	1,055	253	1,028	1,396	1,679



Planned De-Stocking

From the Welch Ranch Drought Plan

01

Stocker cattle

"If you've got a combination of stocker and cow-calf operation, those stockers are your buffer group that is easy to either move or sell and not have to disturb your core cow herd."

02

Old cows

Selling or relocating the old cows.

03

Bred heifers

"That seems terrible to do because that's the future of your herd, but they are the most difficult to get rebred after they calve. They have to have the most nutrition in order to rebreed for their second calf, of anything that you own, so although you hate to give up on them, that was the next group to destock."

What are the elements of a drought contingency plan?

1 If.....



April is warm and dry

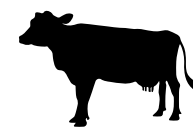


Previous fall was dry



Projected runoff is 50% of average

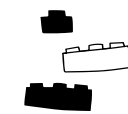
2 Then.....



Cull base herd by X%; Planned de-stocking



Irrigation scheduling



Invest in future infrastructure



Insurance



Heavily stocked pasture at the Central Plains Experimental Range, 1956

Credit: USDA -ARS

Contingency Plan

1

If....

2

Then....

	FORAGE PRODUCTION ESTIMATE	LIKELIHOOD OF SCENARIO AS OF (<i>date</i>)	ADAPTIVE ACTION
BEST CASE 2021	700 lb/acre total 210 lb/acre available	<i>April 1? April 15? May 1?</i>	If scenario looks likely, will cull steers by X%..... or,
AVERAGE CASE 2021	500 lb/acre total 150 lb/acre available		cull to base herd Or ????????
WORST CASE 2021	200 lb/acre 60 lbs/ acre available		?

**Hoping for rain
is not a drought strategy**



Hoping for rain is not a drought strategy

A drought plan

- ✓ Prompts early action
- ✓ Act based on observations
- ✓ Control what you can
- ✓ Protect your legacy



You've got to say, 'What are my current conditions,
and with the amount of
grass I've got, what can I run?'
And I think that's a mindset that's important, because
like I say, every time you get a little shower during a
drought, that gives you
false hope if you're not careful.



- Welch Ranch, Southern Colorado

Thank you

Resources

- drought.advisors@colostate.edu
- [An Easy to Use System for Developing a Drought Management Contingency Plan, Doug Tolleson](#)
- [Rangeland Management Before, During, and After Drought](#) by Larry Howery
- [Intermountain West Climate Dashboard](#)
- [CSU Extension Drought Page](#)

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[@RangelandsColorado](#)

