

2016

WELCOME

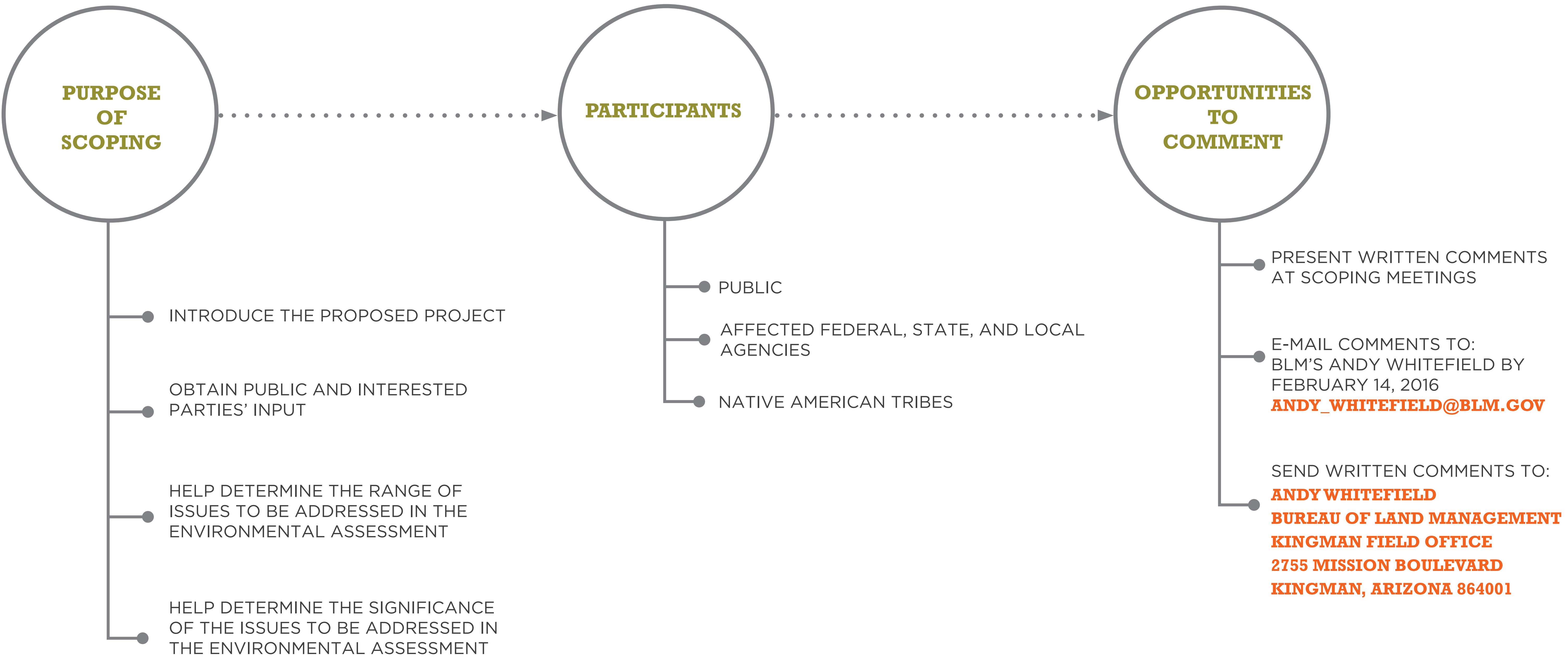
GOLDEN VALLEY 230kV

TRANSMISSION LINE PROJECT

UniSource Energy
SERVICES

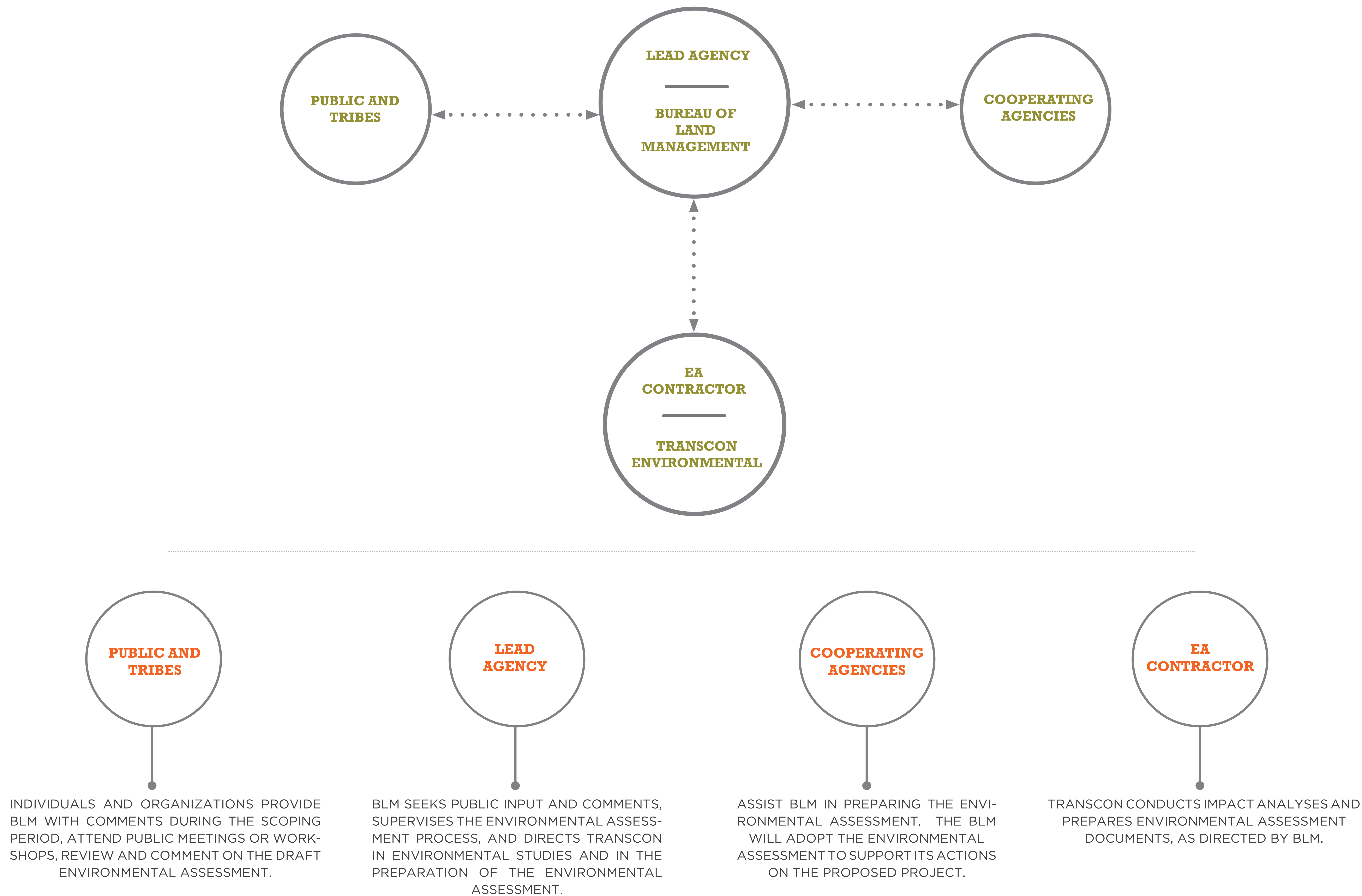
GOLDEN VALLEY 230kV TRANSMISSION LINE PROJECT

SCOPING PROCESS



GOLDEN VALLEY 230kV TRANSMISSION LINE PROJECT

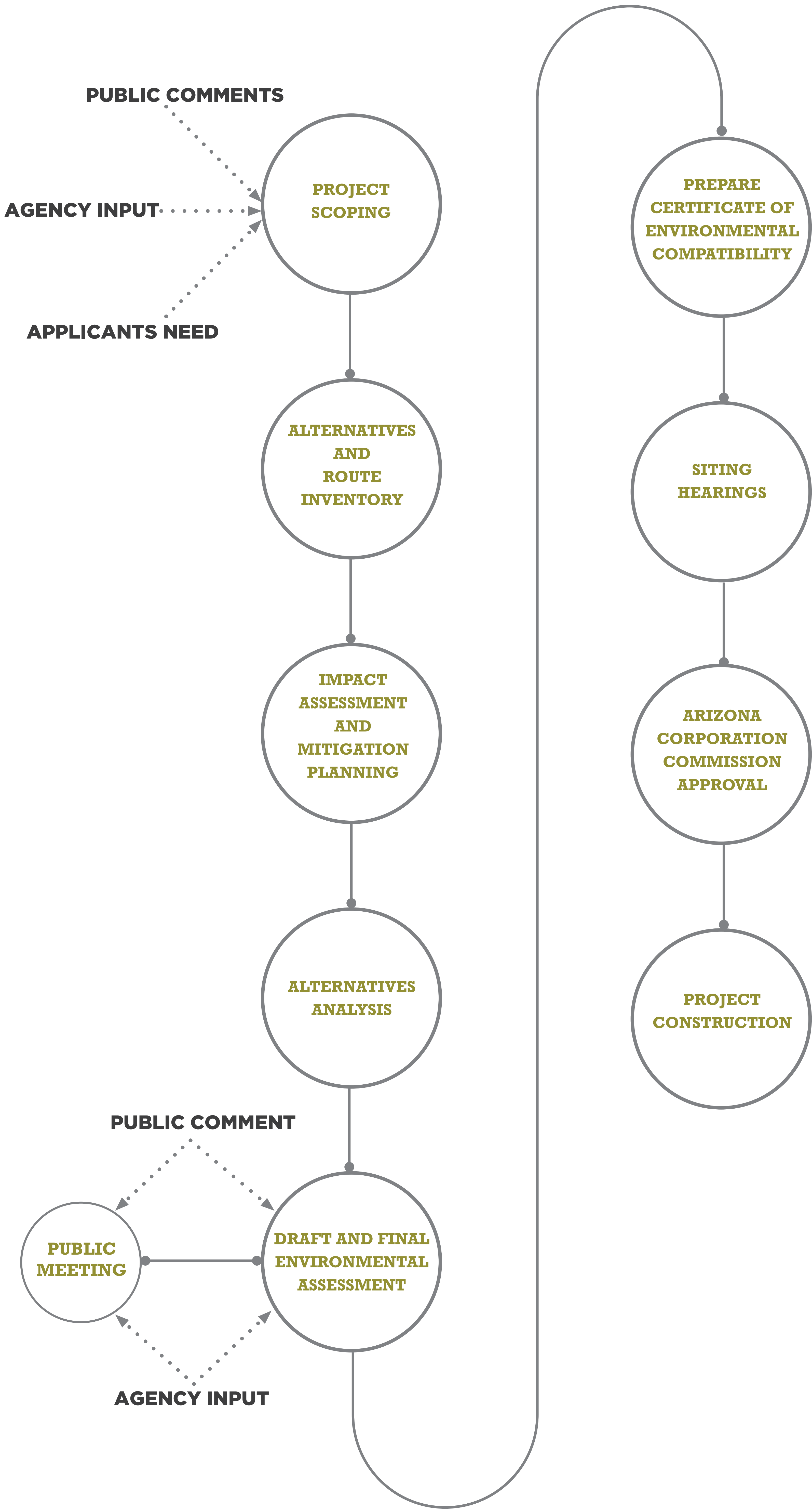
EA ROLES AND RESPONSIBILITIES



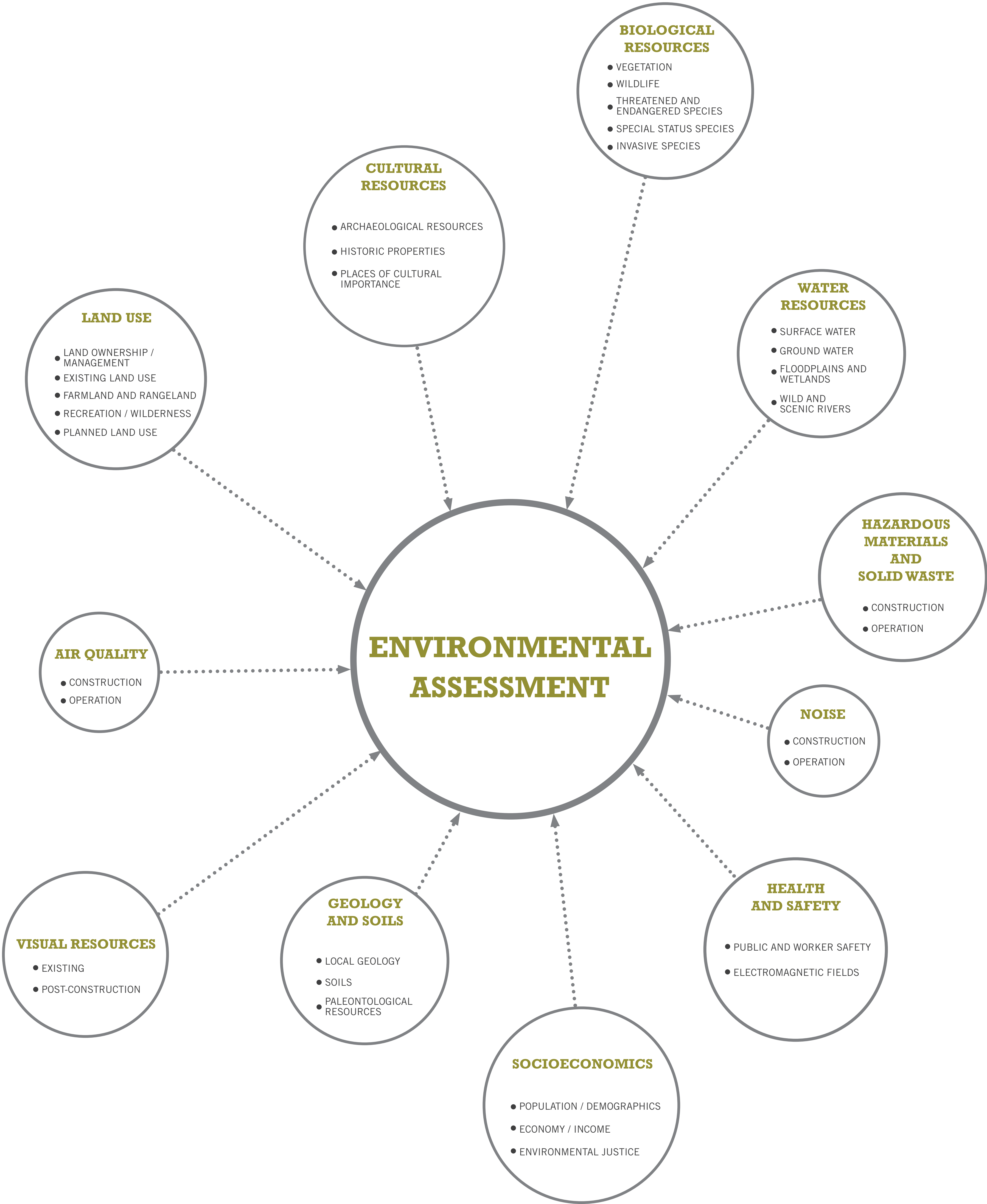
GOLDEN VALLEY 230kV TRANSMISSION LINE PROJECT

REGULATORY PROCESS

REGULATORY PROCESS

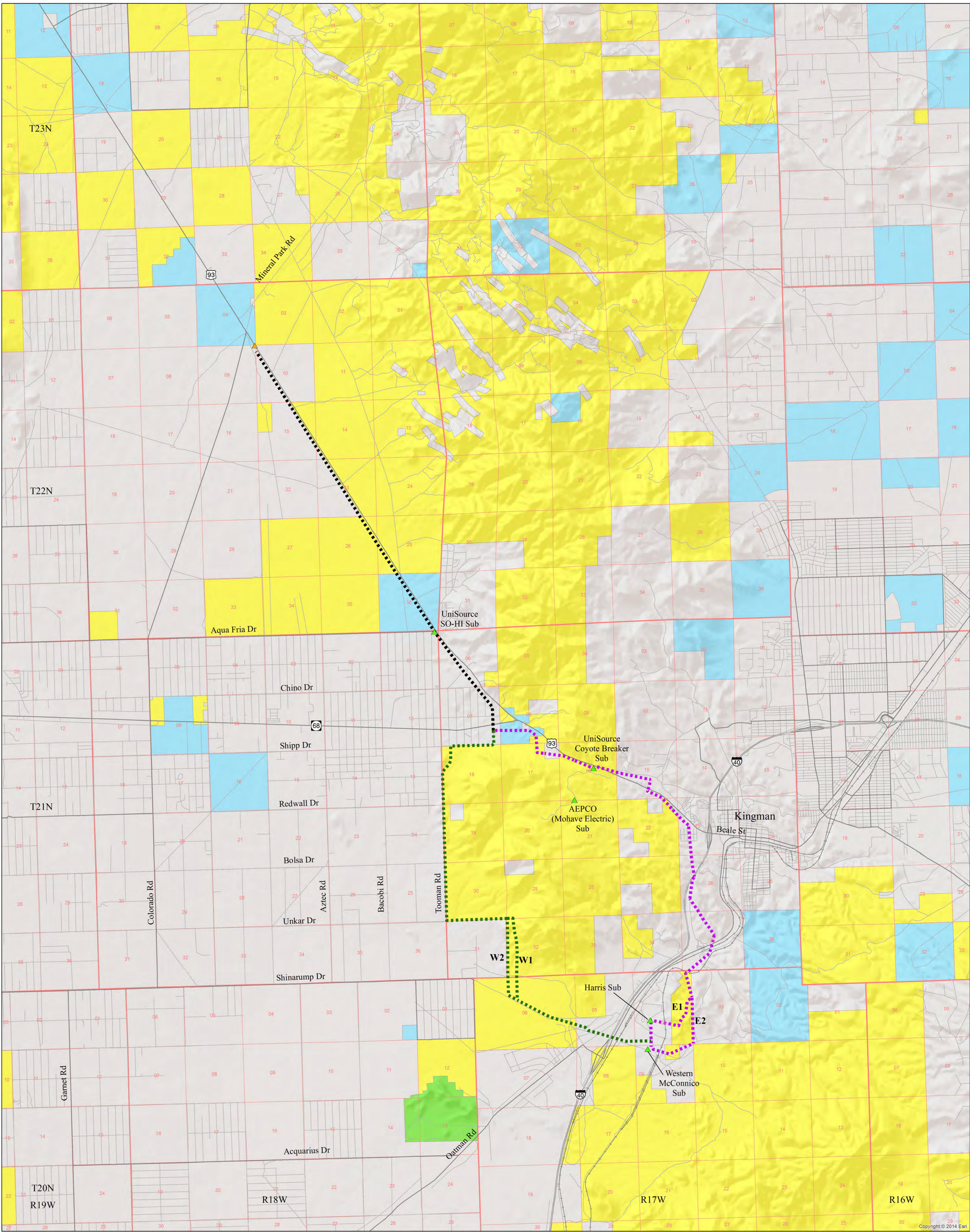


RESOURCES TO BE ADDRESSED IN THE ENVIRONMENTAL ASSESSMENT



GOLDEN VALLEY 230kV TRANSMISSION LINE PROJECT

PROJECT AREA OVERVIEW



0 1 2 Miles

- Existing Substation
- Proposed Substation
- Common Alternatives
- Eastern Alternatives
- Western Alternatives
- Bureau of Land Management
- Arizona Game and Fish
- Private Land
- State Trust Land

Project Vicinity Map

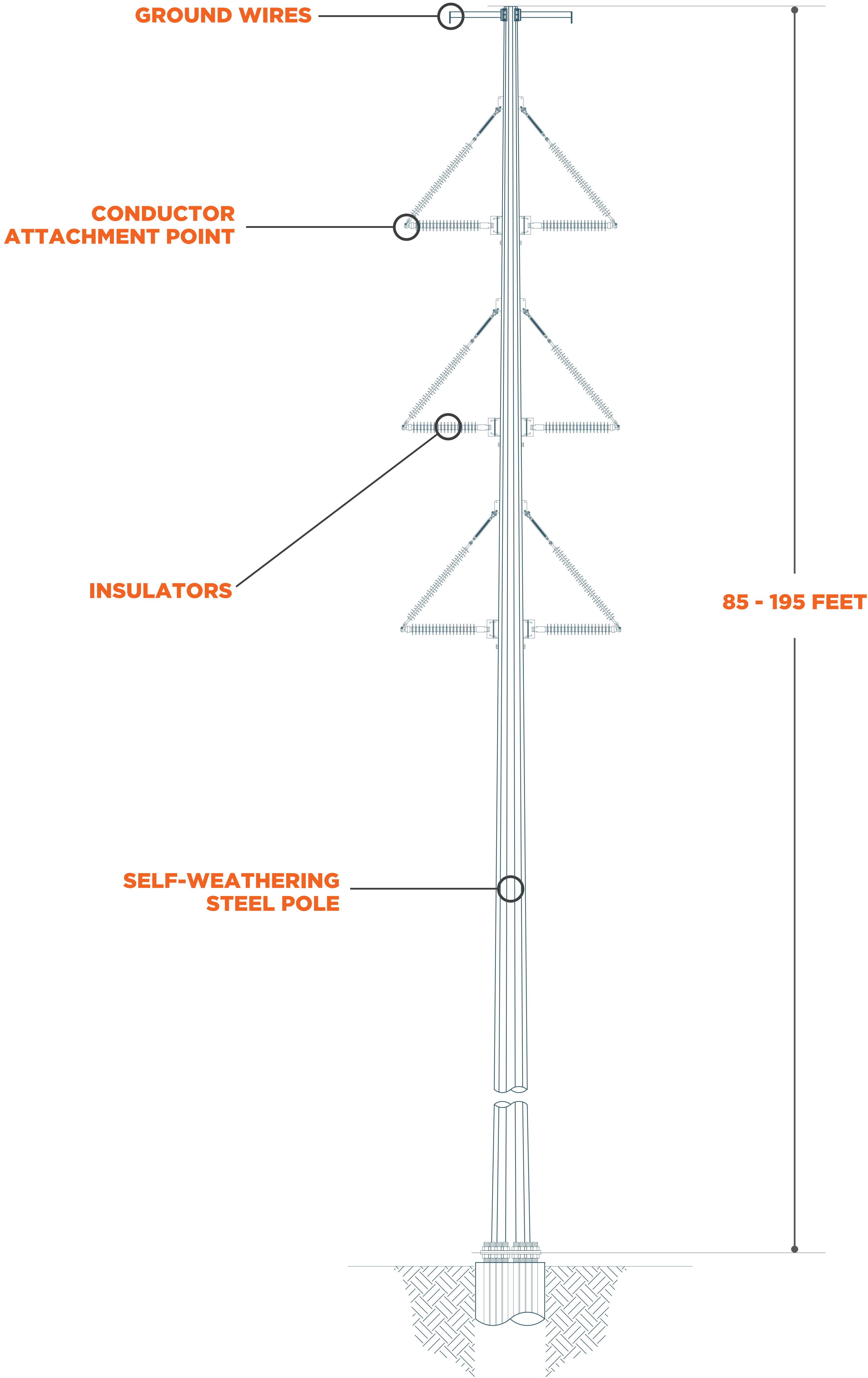
Golden Valley 230kV
Transmission Line Project

UNS Electric Inc.



GOLDEN VALLEY 230kV TRANSMISSION LINE PROJECT

TYPICAL POLE STRUCTURE



GOLDEN VALLEY 230kV TRANSMISSION LINE PROJECT

DOUBLE CIRCUIT 230kV / 69kV

GOLDEN VALLEY 230kV TRANSMISSION LINE PROJECT

PUBLIC INVOLVEMENT

HOW TO GET INVOLVED

CALL

TOLL FREE : (844) 882-8899

EMAIL

ANDY_WHITEFIELD@BLM.GOV

LETTER

**ANDY WHITEFIELD
BUREAU OF LAND MANAGEMENT
KINGMAN FIELD OFFICE
2755 MISSION BOULEVARD
KINGMAN, ARIZONA 864001**

**COMMENT
FORM**

**AVAILABLE AT THE PROJECT
INFORMATION TABLE**

GOLDEN VALLEY 230kV TRANSMISSION LINE PROJECT

ELECTRIC & MAGNETIC FIELDS

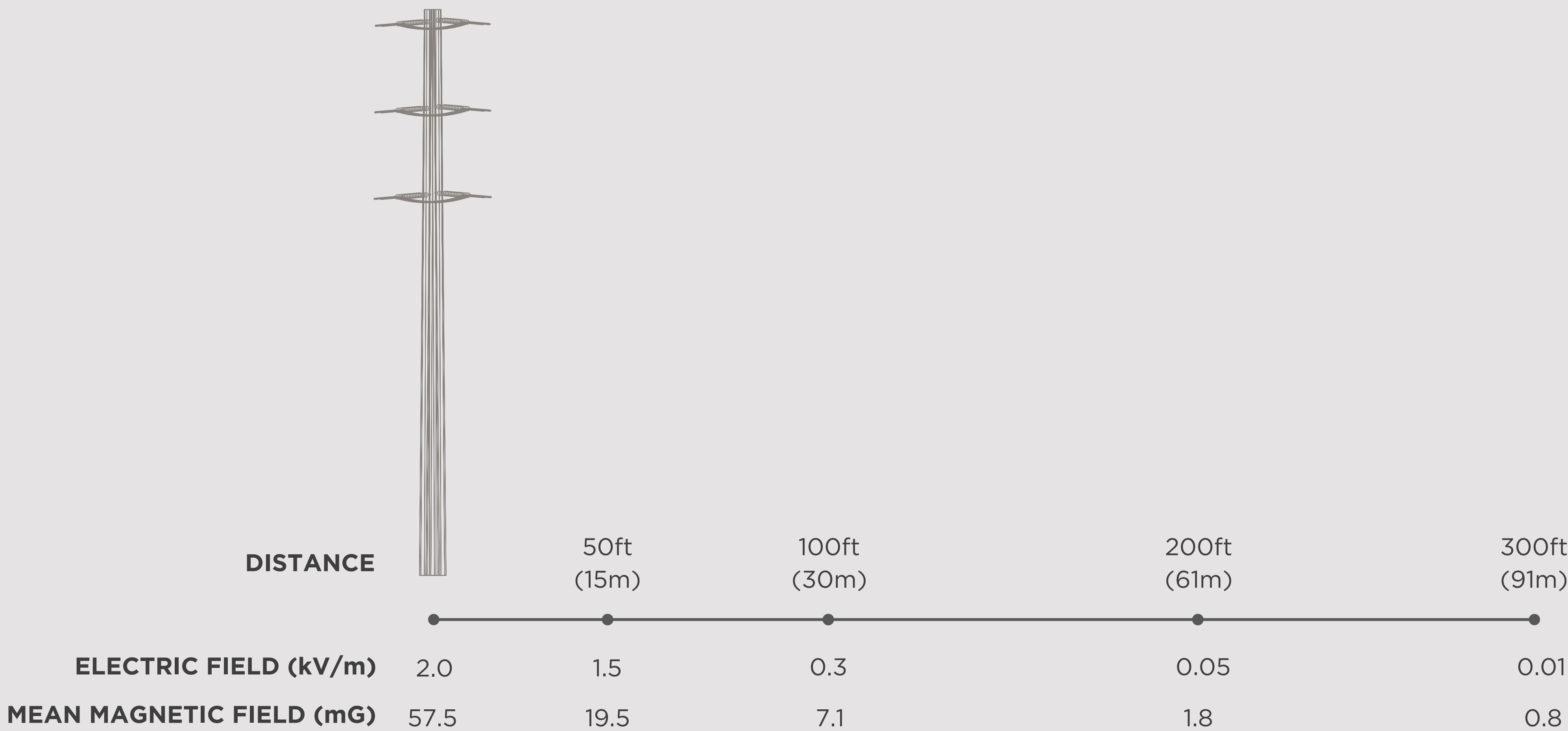


ELECTRIC AND MAGNETIC FIELDS (EMFs) ARE FORCES THAT SURROUND ANY ELECTRICAL DEVICE

TYPICAL 60 Hz MAGNETIC FIELD LEVELS FROM SOME COMMON HOME APPLIANCES

	MAGNETIC FIELD 6 INCHES FROM APPLIANCE (mG)	MAGNETIC FIELD 2 FEET FROM APPLIANCE (mG)
ELECTRIC SHAVER	100	-
VACUUM CLEANER	300	10
ELECTRIC OVEN	9	-
DISHWASHER	20	4
MICROWAVE OVEN	200	10
HAIR DRYER	300	-
COMPUTER	14	2
FLUORESCENT LIGHTS	40	2
FAX MACHINE	6	-
COPY MACHINE	90	7
GARBAGE DISPOSAL	80	2

TYPICAL EMF LEVELS FOR A 230kV TRANSMISSION LINE



SOURCE: BONNEVILLE POWER ADMINISTRATION, 1994

ELECTRIC FIELDS

- PRODUCED BY VOLTAGE; INCREASES IN STRENGTH AS VOLTAGE INCREASES
- DECREASES IN STRENGTH WITH DISTANCE
- WEAKENED BY BUILDINGS, SKIN, AND VEGETATION

MAGNETIC FIELDS

- PRODUCED AS CURRENT FLOWS THROUGH WIRES OR ELECTRIC DEVICES
- INCREASES IN STRENGTH AS CURRENT INCREASES
- DECREASES IN STRENGTH WITH DISTANCE
- OBSTACLES DO NOT WEAKEN MAGNETIC FIELD STRENGTH

EMF INFORMATION RESOURCES

- ENVIRONMENTAL HEALTH INFORMATION SERVICES - [HTTP://EHIS.NIEHS.NIH.GOV](http://ehis.niehs.nih.gov)
- WORLD HEALTH ORGANIZATION - [HTTP://WWW.WHO.INT/EMF](http://www.who.int/emf)