DMS NATURAL RESOURCES

OVERVIEW OF WATER SUPPLY OPTIONS IN MONTANA

Prepared for

Water Policy Interim Committee

May 2, 2016

by

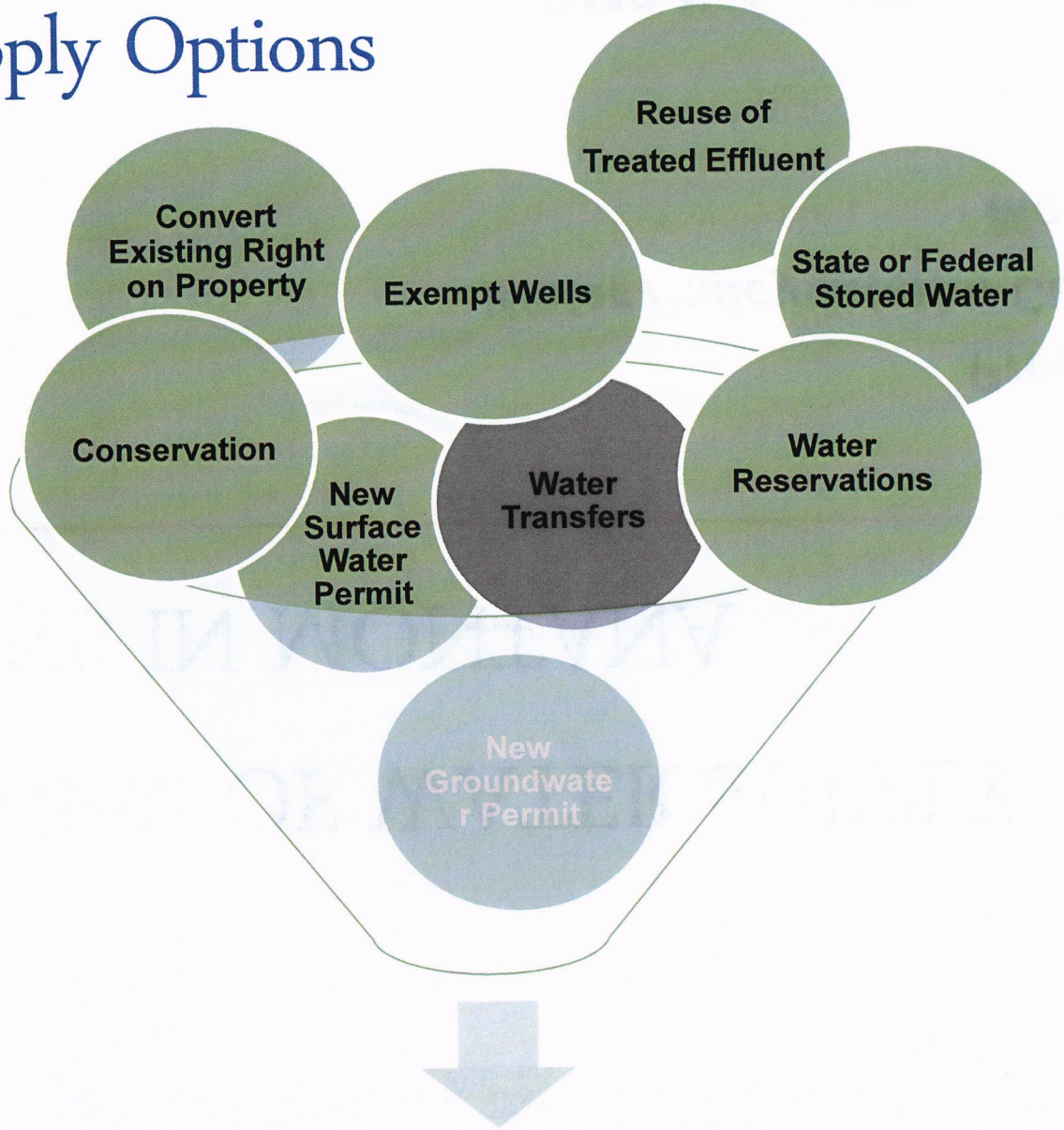
DMS Natural Resources, LLC

WATER POLICY INTERIM COMMITTEE 2015-16

May 2, 2016

Exhibit 1

Water Supply Options



Future Water Supply

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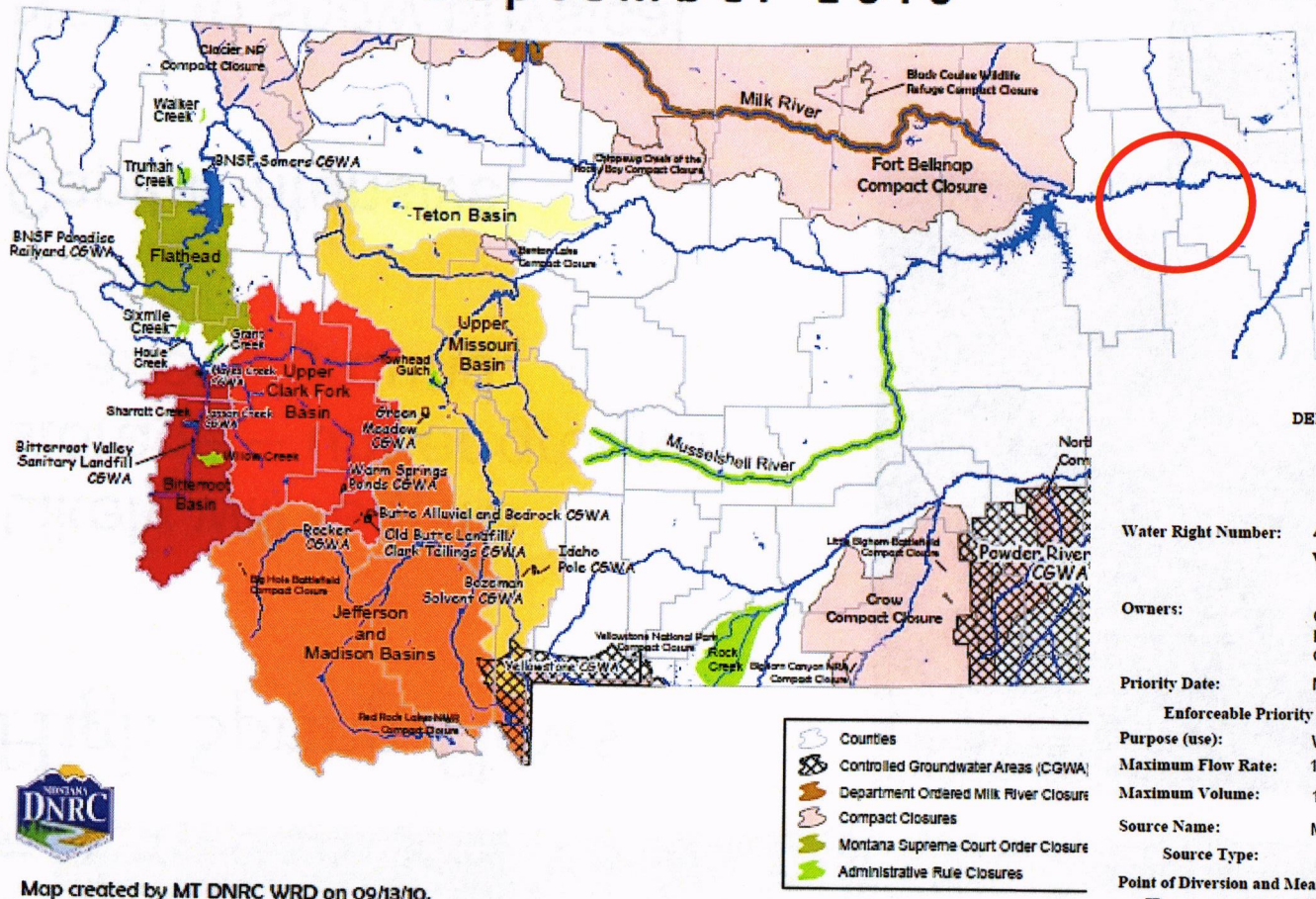
New Surface Water Appropriation



STATE OF MONTANA
DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

Water Right Number: 40S 30048631 PROVISIONAL PERMIT
Version: 1 -- ORIGINAL RIGHT
Version Status: ACTIVE

Owners: CULBERTSON WATER DEPOT LLC
PO BOX 410
CULBERTSON, MT 59218-0410

Priority Date: MAY 25, 2010 at 11:35 A.M.
Enforceable Priority Date: MAY 25, 2010 at 11:35 A.M.
Purpose (use): WATER MARKETING
Maximum Flow Rate: 1,750.00 GPM
Maximum Volume: 1,843.00 AC-FT
Source Name: MISSOURI RIVER
Source Type: SURFACE WATER

Point of Diversion and Means of Diversion:

ID	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1		NWNENW	9	27N	56E	RICHLAND

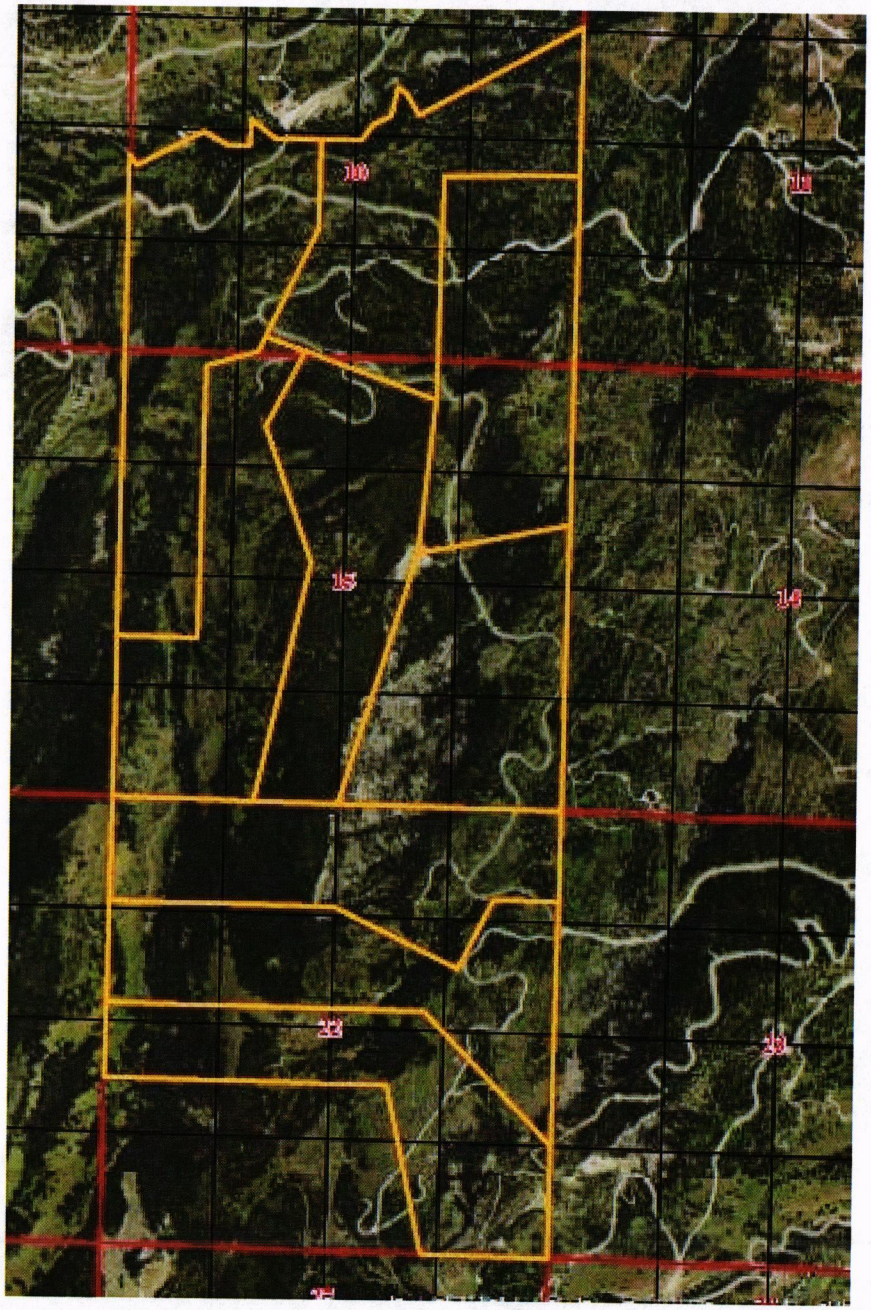
Period of Diversion: JANUARY 1 TO DECEMBER 31

High Spring Flows

- Likely will require storage – under ground or above ground.
- Capital intensive.
- Need to show physical and legal availability.
- Junior water right.

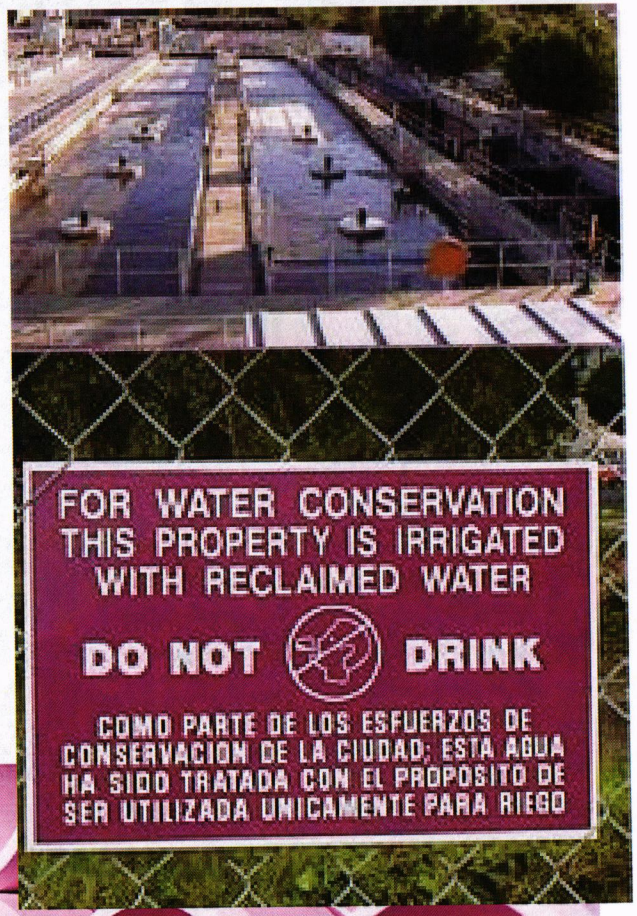
Permit Exempt Wells

- Large lots.
- Changing combined appropriation rules.
- City parks – reduced treatment costs.



Reuse of Treated Effluent

- "Purple Pipe"
- Expensive to implement, infrastructure intensive – treatment and distribution.
- Public perception issues.
- Reduce reliance on raw water supplies.



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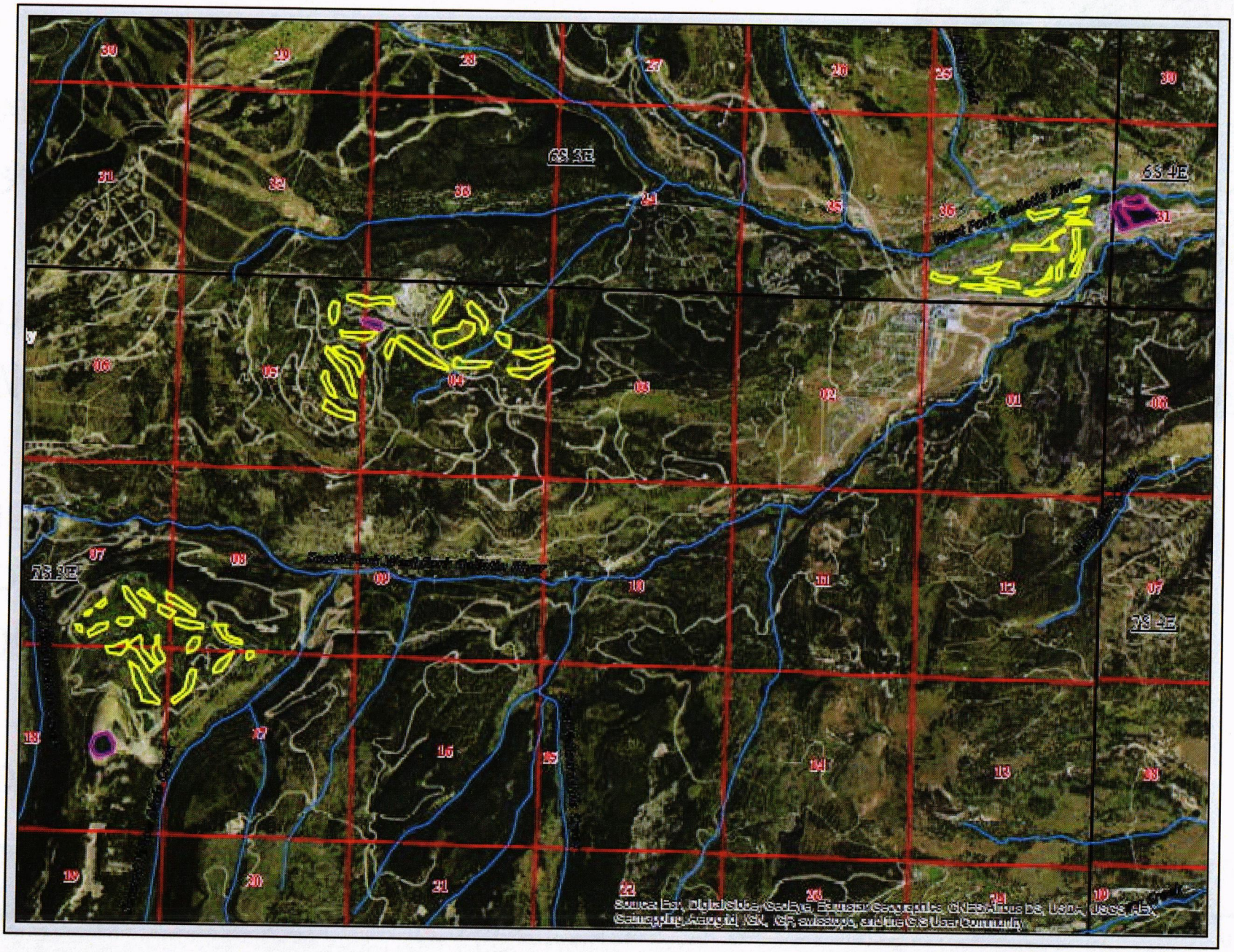
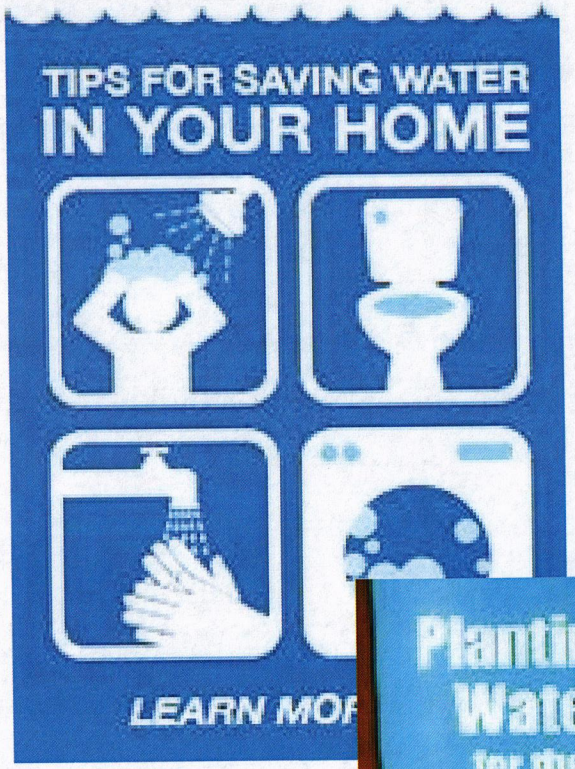
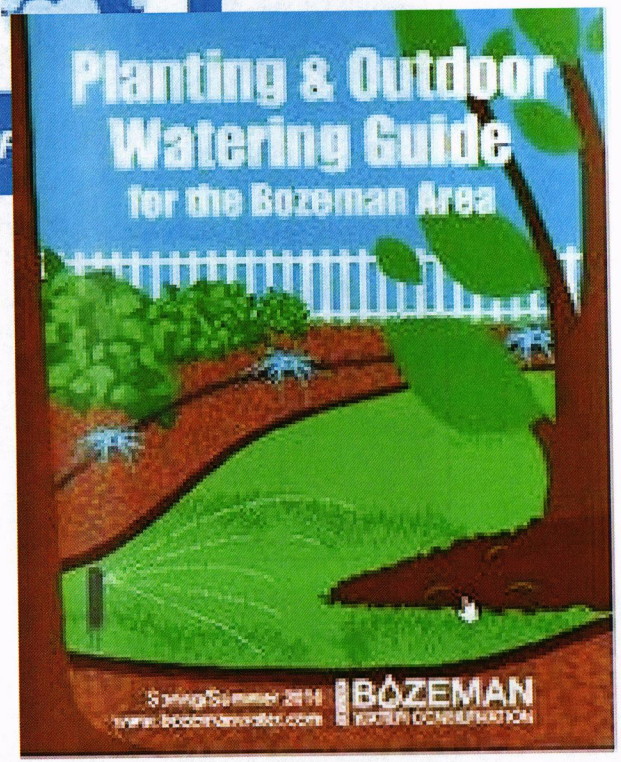


Conservation

- Demand reduction tool - focuses on changing water use behaviors.
- Most applicable for municipalities.
- Reduce reliance on raw water supplies.





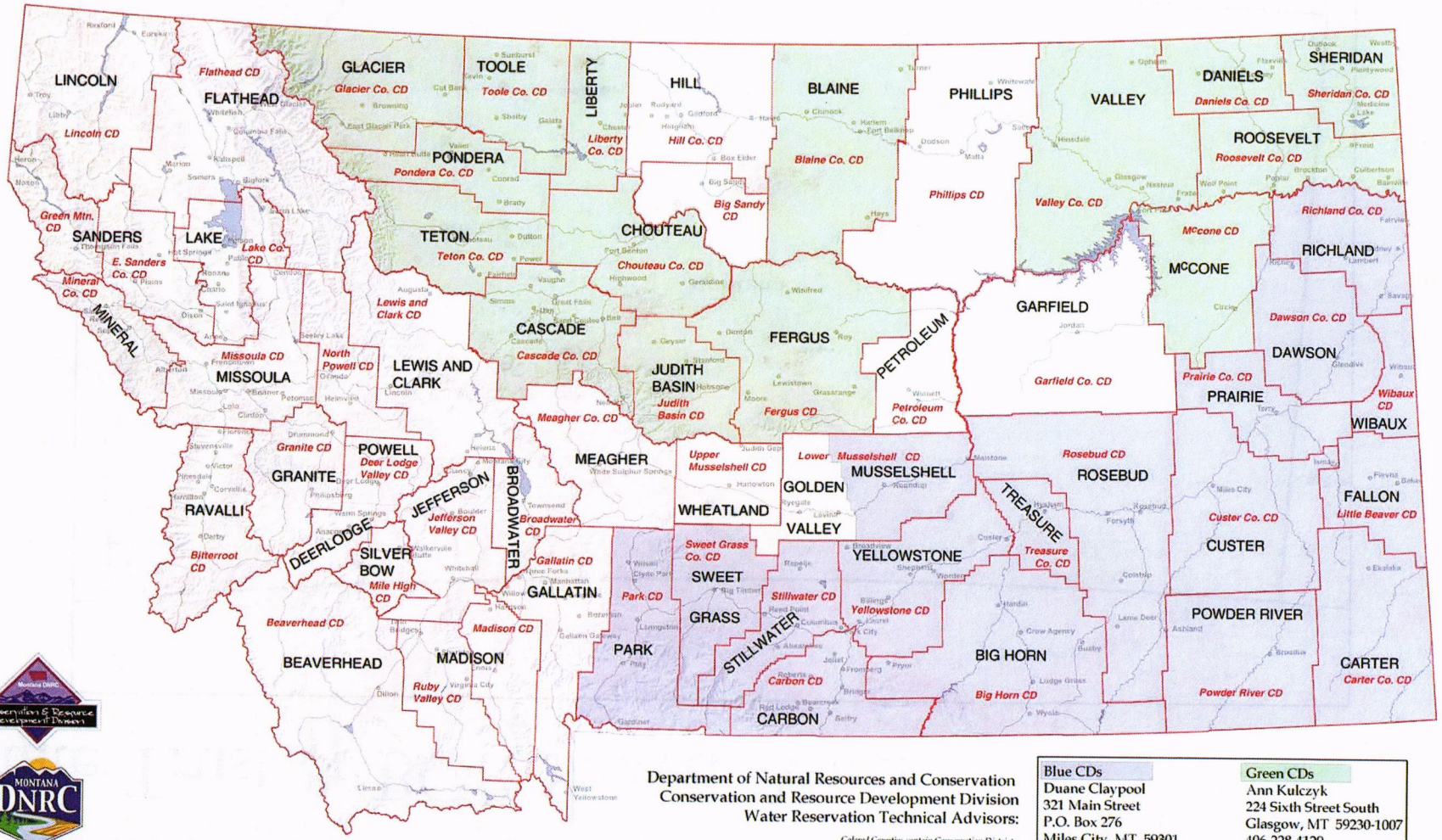
Agricultural Conservation for Instream Flow

Water Reservation

- Throughout the state there are Water Reservations for: municipal, irrigation, stock water, and instream flows.
- Granted for future beneficial uses or to maintain minimum streamflows or quality of water.

- Municipal Reservations in 41H:
  - Town of West Yellowstone
    - Whiskey Springs, 1922 GPM, 1,189 AF
  - Town of Three Forks
    - Groundwater, 112 GPM, 81 AF
  - Town of Belgrade
    - Groundwater, 1,600 GPM, 645 AF
  - City of Bozeman
    - Sourdough Creek, 47.3 cfs, 2,857 AF

Conservation Districts with Water Reservations for Agricultural Development

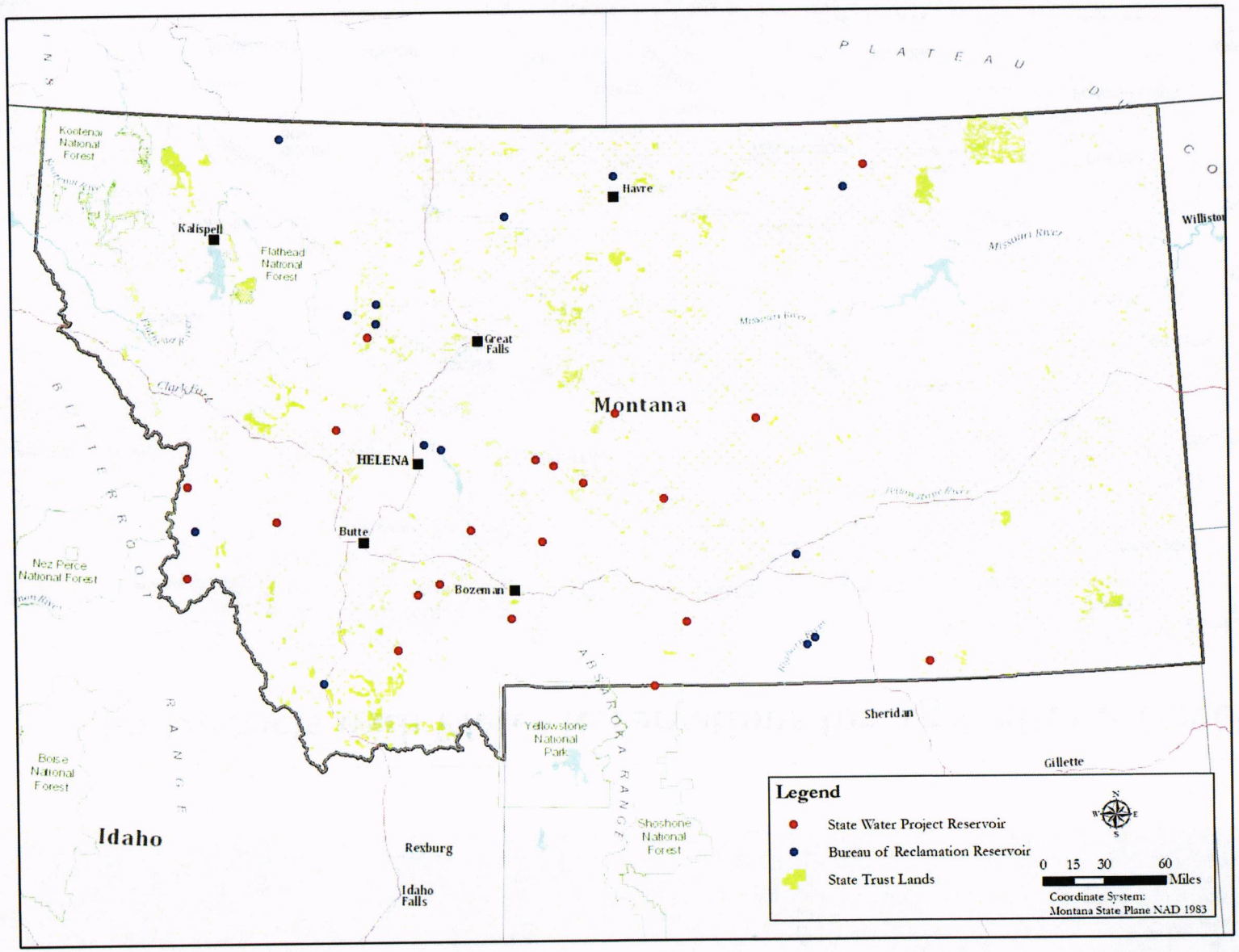


Department of Natural Resources and Conservation
Conservation and Resource Development Division
Water Reservation Technical Advisors:

Colored Counties contain Conservation Districts with Water Reservations for Agricultural Development

Blue CDs	Green CDs
Duane Claypool	Ann Kulczyk
321 Main Street	224 Sixth Street South
P.O. Box 276	Glasgow, MT 59230-1007
Miles City, MT 59301	406-228-4129
406-232-6359	

State Trust & BOR Stored Water



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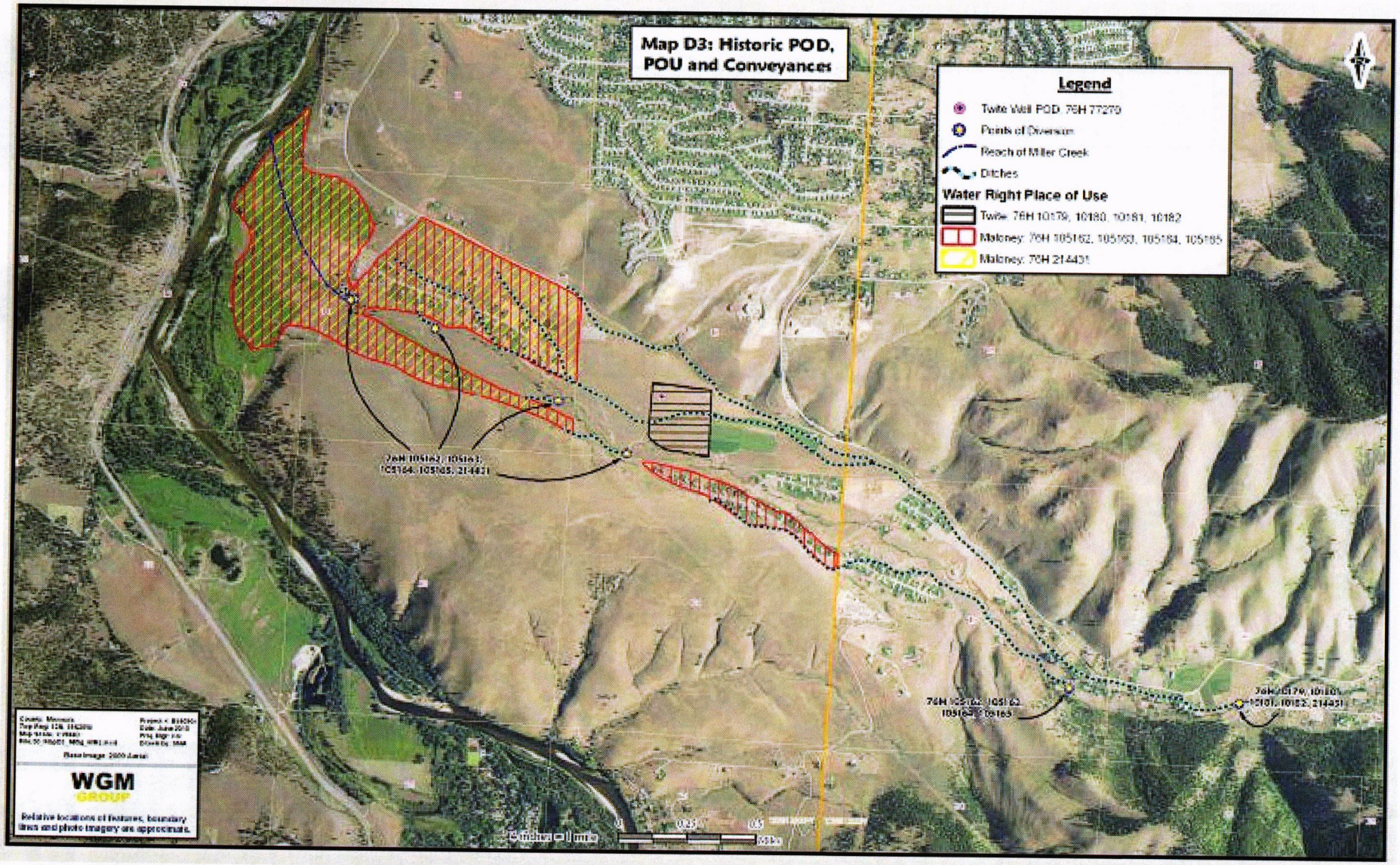
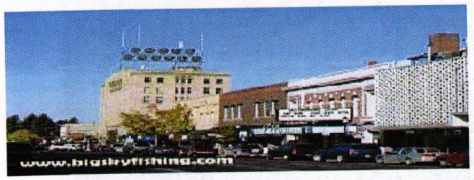
Convert Existing Water Right on Property



Seasonality

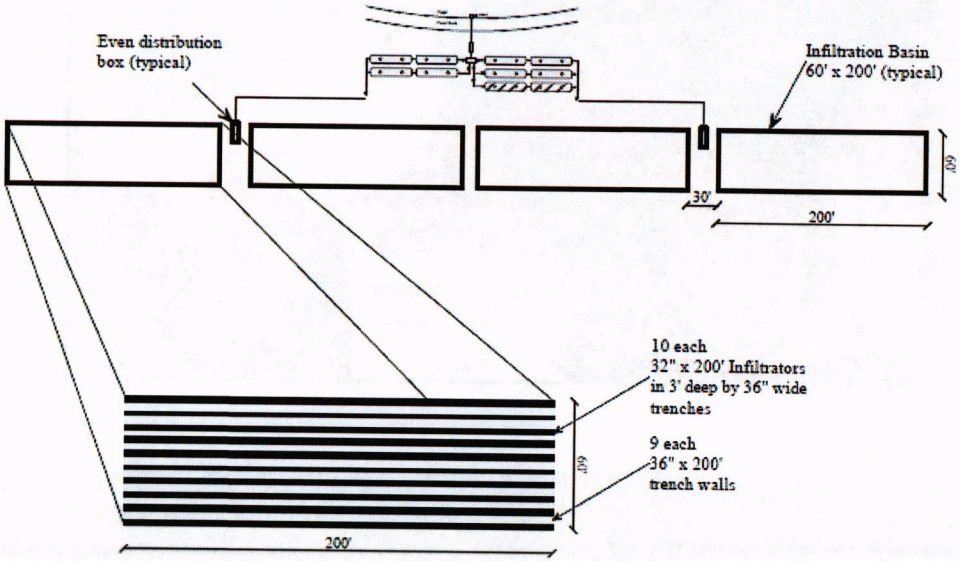


Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

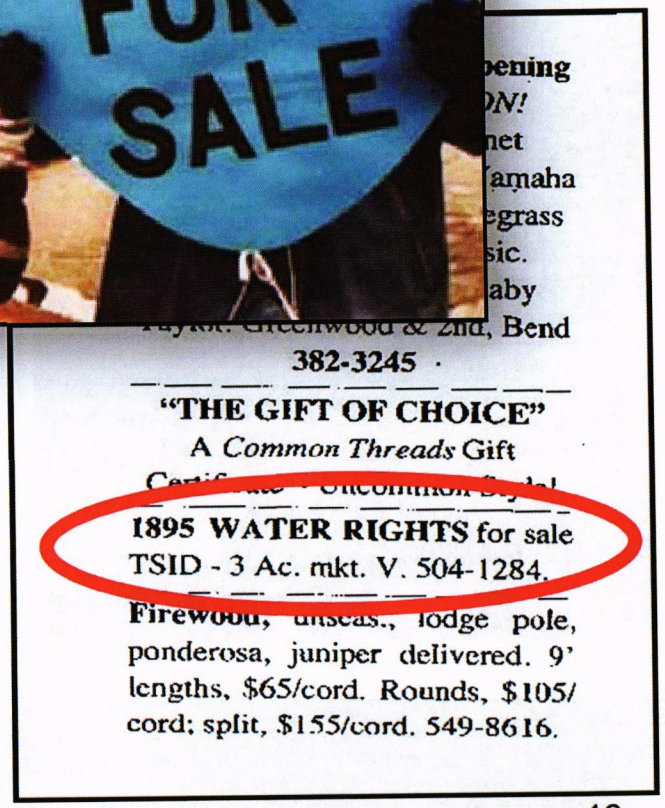
New Groundwater Permit

- In closed basins will require mitigation.
- Seasonal issues with mitigation water.
- Infiltration gallery and/or find winter water rights.
- Location, timing, volume.



1:1 Water Transfers

- Reallocation of water assets from one entity to another entity.
- Water rights are transferable separate from property.



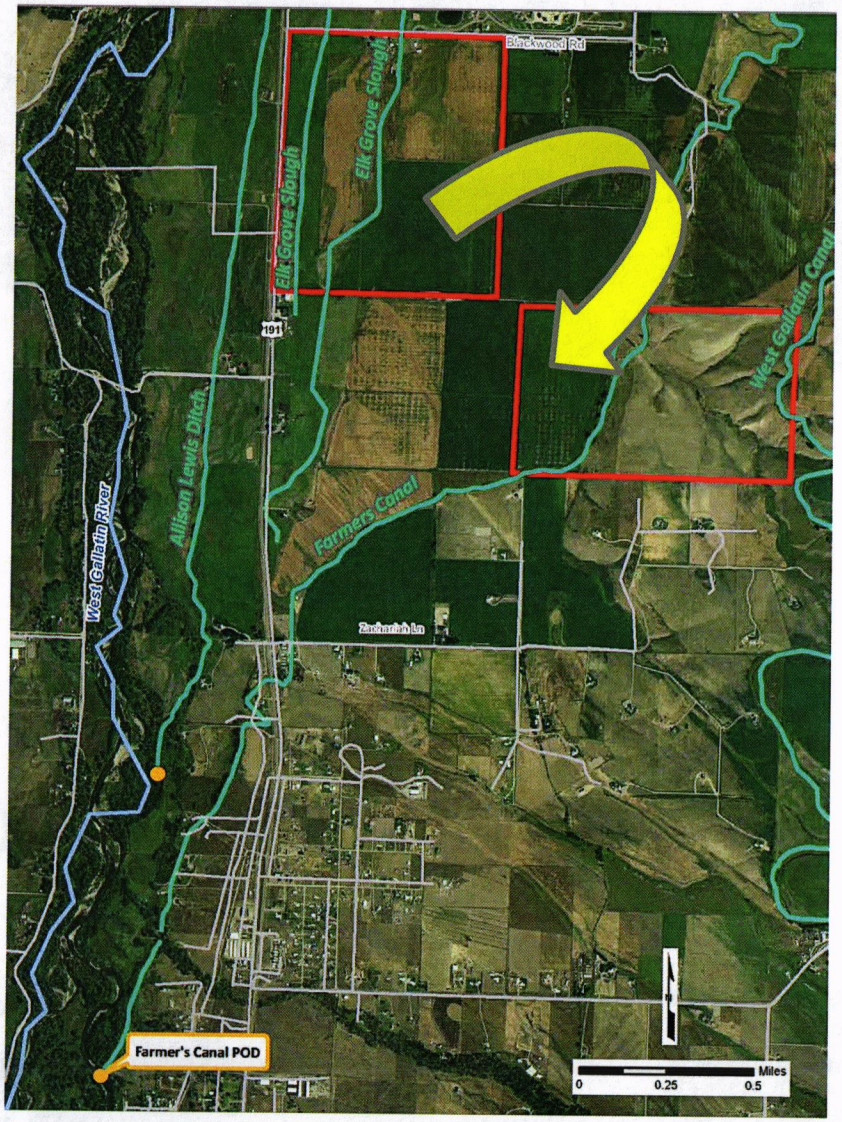
382-3245

"THE GIFT OF CHOICE"
A *Common Threads* Gift

1895 WATER RIGHTS for sale
TSID - 3 Ac. mkt. V. 504-1284.

Firewood, unseas., lodge pole, ponderosa, juniper delivered. 9' lengths, $65/cord. Rounds, $105/cord; split, $155/cord. 549-8616.

Water Rights Are Severable and Changeable



- Changeable
  - Place of Use
  - Point of Diversion
  - Storage
  - Purpose
- Non - Changeable
  - Priority
  - Period of diversion
  - Source (with exceptions)

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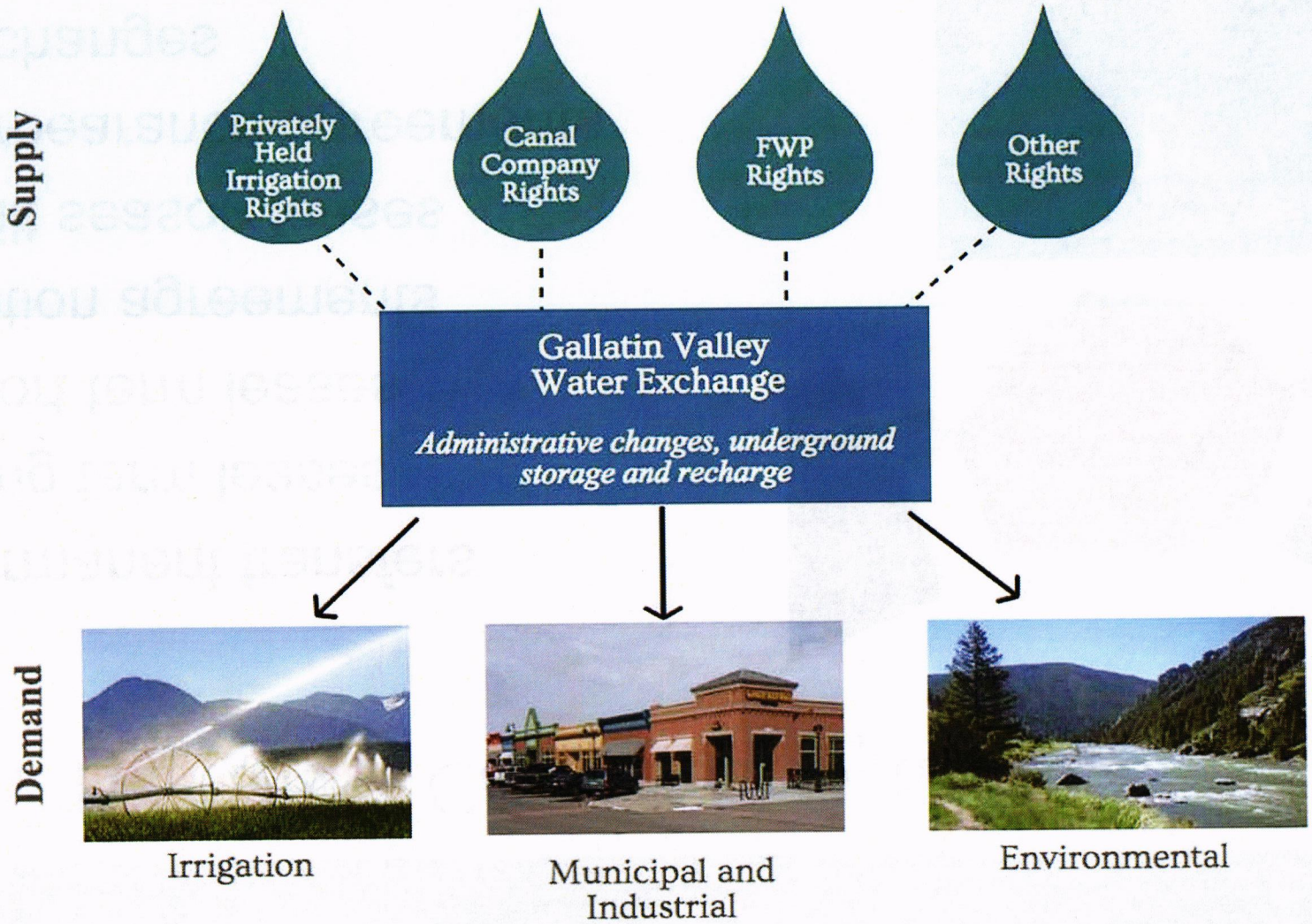
Direct Use or Mitigation

Water Transfers – Contractual Options

- Permanent transfers
- Long term leases
- Short term leases
- Option agreements
- Spilt season leases
- Forbearance agreements
- Exchanges

Water Exchanges or "Banks"



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QUESTIONS

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www.dmsnaturalresources.com