

DESCHUTES BASIN GROUNDWATER MITIGATION PROGRAM

OREGON



WATER RESOURCES
DEPARTMENT

2017 Annual Review and Five-Year Administrative Evaluation

Dwight French

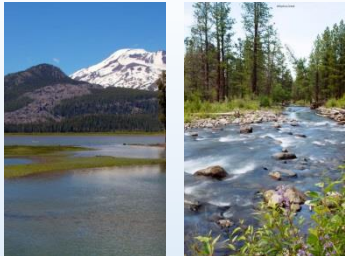
Water Right Services Division Administrator

Lisa Jaramillo

Transfer and Conservation Section Manager

Sarah Henderson

Flow Restoration Program Coordinator



History and Background

1993
Deschutes
Basin
Groundwater
(GW) Study

1998
Conclusions
showed
direct
hydraulic
connection

2002
Deschutes
Basin GW
Mitigation
Program
developed

Goals of the Mitigation Program

Maintain Scenic
Waterway and
Instream Water Right
Flows

Accommodate growth
through new GW
development and
sustain exiting uses

Facilitate Restoration of
Flows in Middle
Deschutes River and
Tributaries



Upper Deschutes River (flow is about 1200 cfs 9-4-18)
shows the high banks and ash layer in the sediment

Reporting Requirements

Annual Review

Division(Div.) 505

- New GW appropriations
- Mitigation activity
- Streamflow monitoring and evaluation
- Consult other state agencies
- SWW and ISWR flows met on an equivalent or more frequent basis

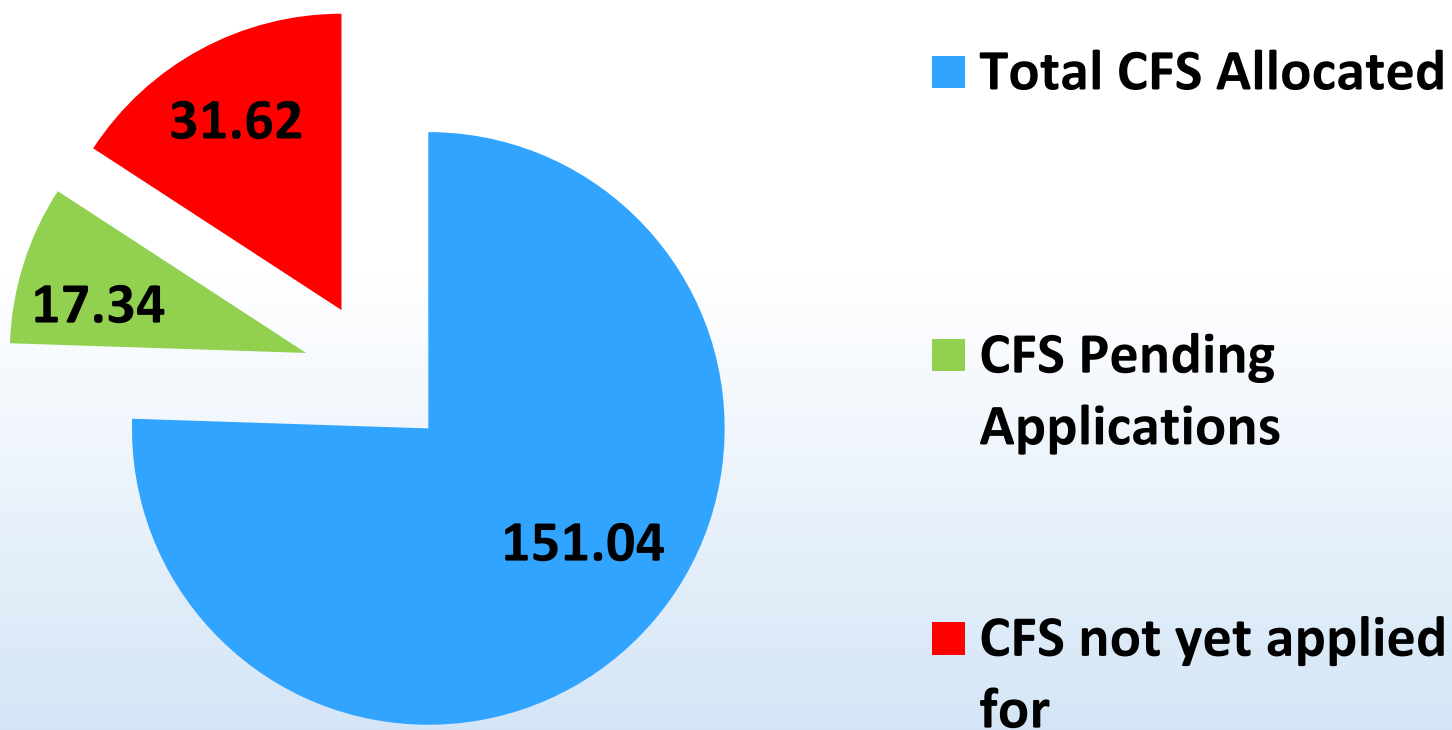
Div. 521

- Mitigation Bank activity

Five-Year Review – Div. 505

- Status of the 200 cubic feet per second (cfs) Allocation Cap
- Mitigation activity
- Zones of impact
- Streamflow monitoring and evaluation
- Effectiveness of mitigation projects and mitigation credits

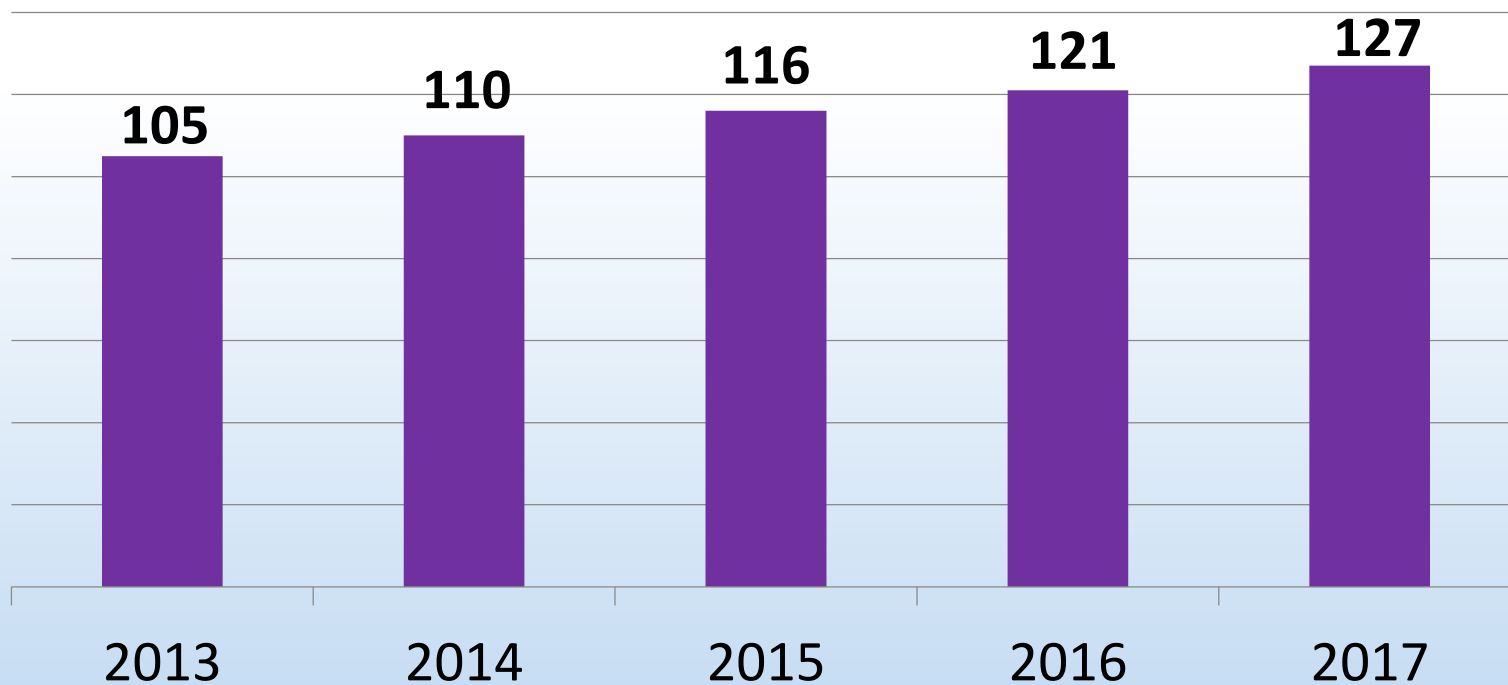
Status of 200 CFS Allocation Cap At the end of 2017



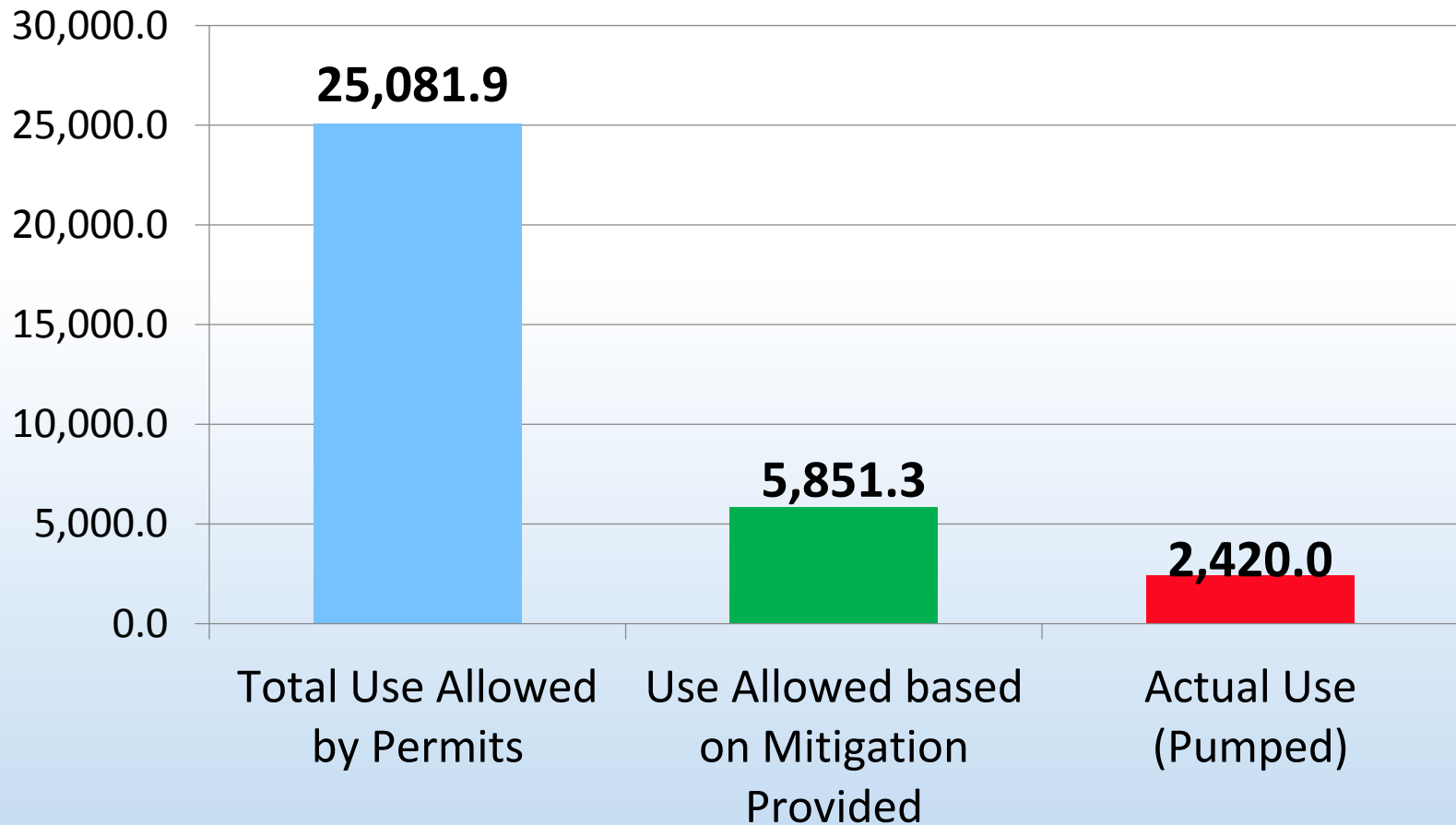
Mitigation Activity Issuance of Permits

- 127 permits issued through end of 2017
- 5-6 new permits issued per year

Cumulative Total Permits by Year



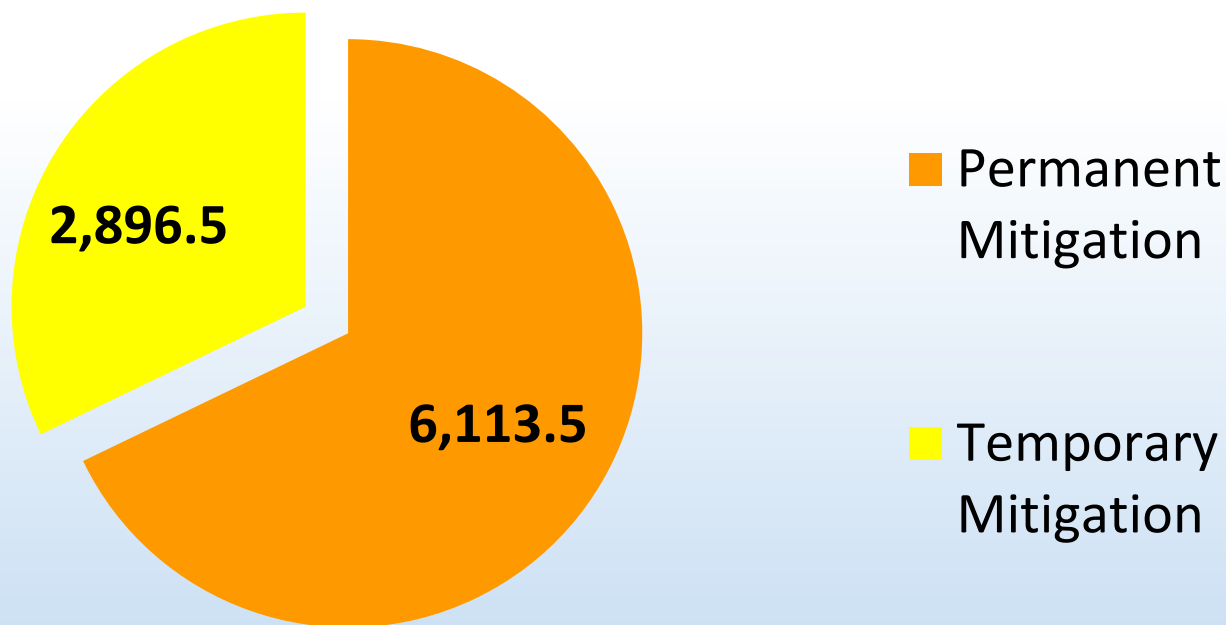
Water Use Volume in Acre-Feet



Mitigation Activity Established Mitigation Credits

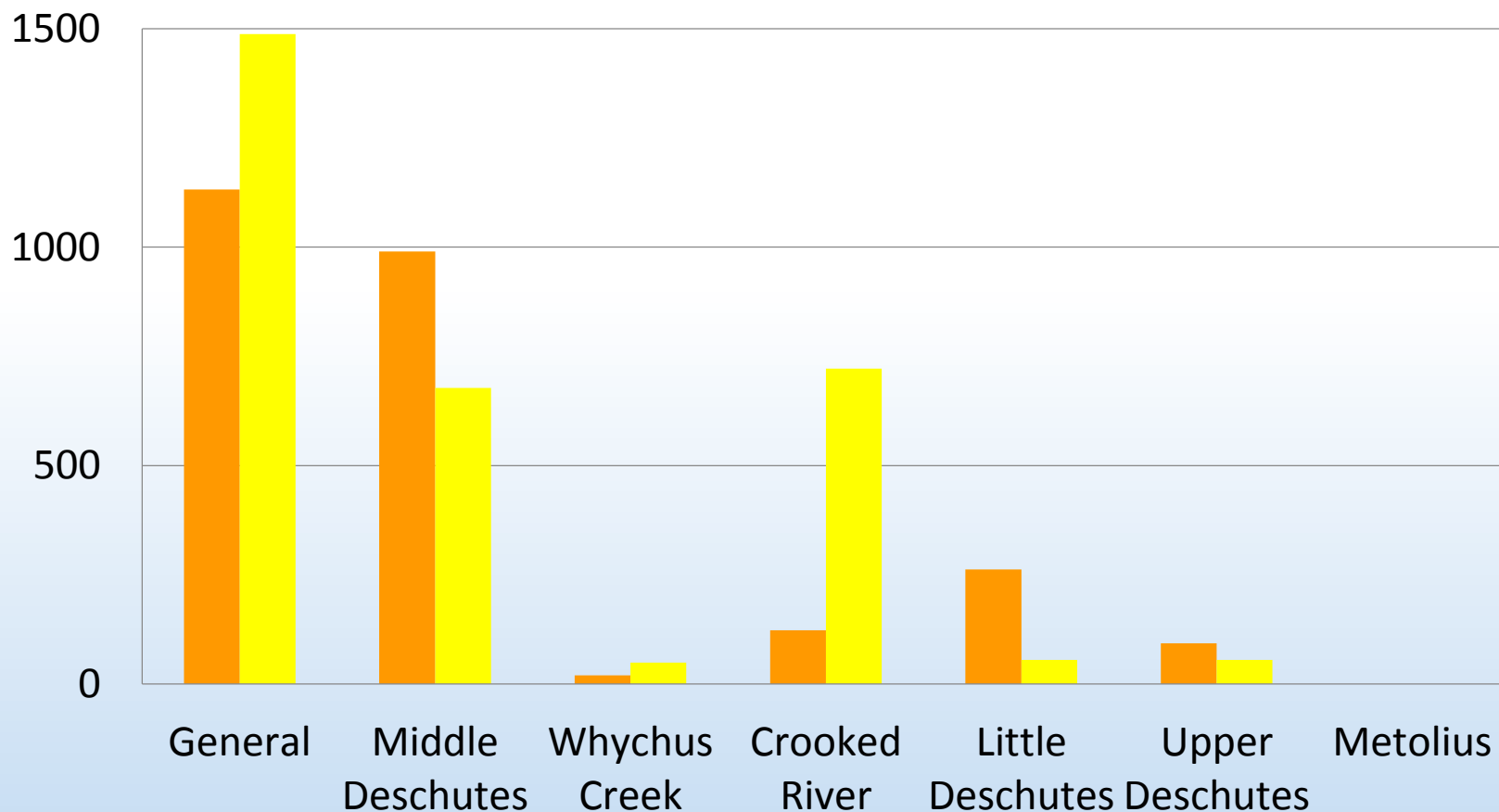
- 45 permanent instream transfers (cumulative throughout program)
- 22 temporary instream leases (2017 only)

Volume in Acre-Feet



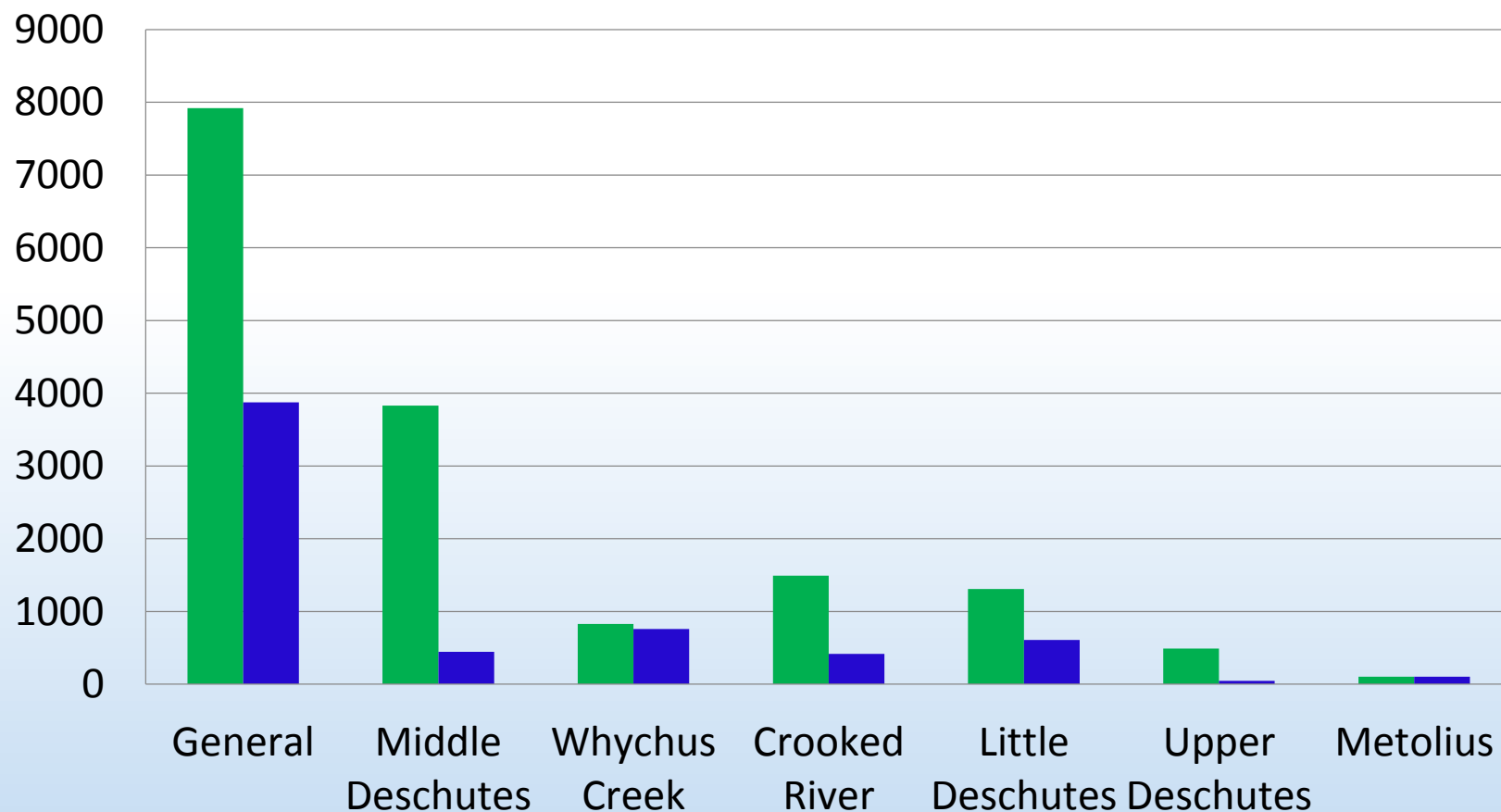
Mitigation Activity Established Credits by Zones of Impact

Permanent Temporary



Mitigation Activity Credits by Zones of Impact

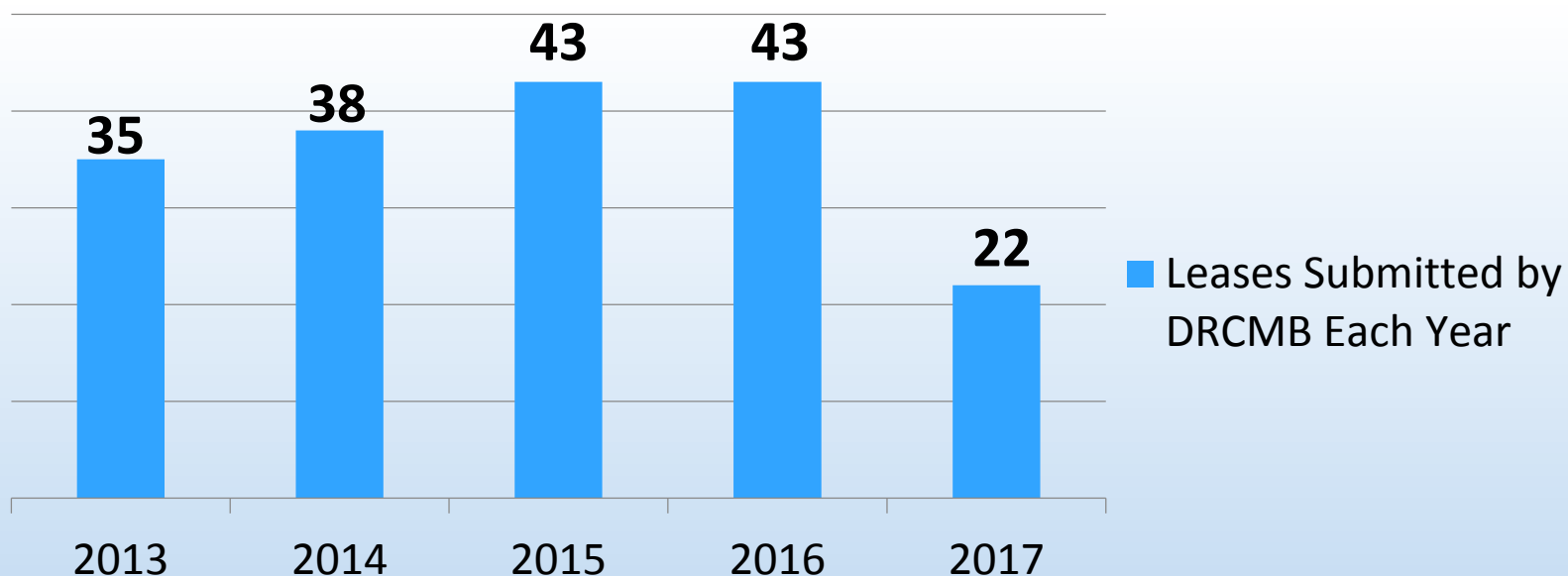
■ Established ■ Allocated



Mitigation Bank Activity

Deschutes River Conservancy Mitigation Bank (DRCMB)

- Reports Annually
- Maintains a sufficient “reserve” of credits



Streamflow Model

- Base period of 1966 to 1995 at selected gaging stations
- Considers new groundwater uses and mitigation projects on streamflows

Instream Results

- All changes are small
- Additional evaluation needed

Streamflow Model Data Annual Numbers for 2017

Gage Site	Base Line Percentage of Time Instream Requirements are met	Change in Percent of Time Instream Requirements are met
Deschutes River at Mouth	96.2	0.08
Deschutes River below Pelton Dam	69.3	0.81
Metolius River at Lake Billy Chinook	99.7	0.00
Deschutes River at Lake Billy Chinook	99.3	0.63
Deschutes River at Lower Bridge (Downstream of Bend)	28.6	-0.21
Deschutes River above diversion dam at Bend	67.4	-0.11
Deschutes River at Benham Falls	63.7	-0.26
Little Deschutes River at mouth	45.3	-0.49
Deschutes River above Little Deschutes River	63.5	0.00

Issues and Next Steps

Comments received by ODFW and DEQ

- Impacts to springs
- Effects on streamflows outside irrigation season
- Other

Deschutes Mitigation Work Group

- Delayed
- Staff turnover
- Other broader discussions & studies currently underway in the Deschutes Basin
- Department still committed

Thank you – Questions?



Whychus Creek