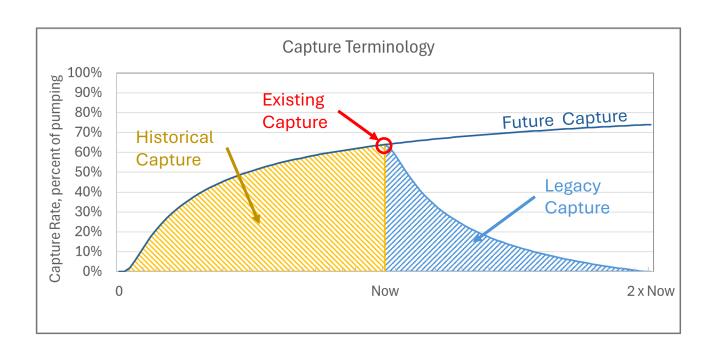
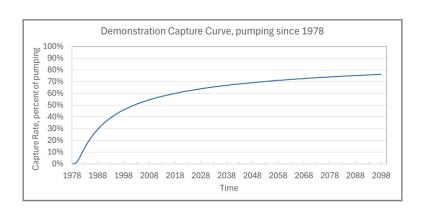
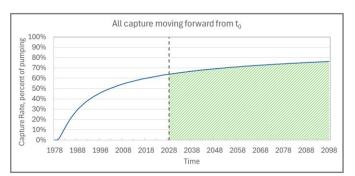
### **Capture Terminology**

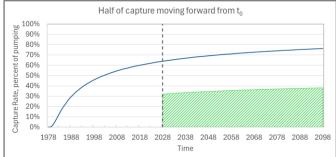


## Concepts for managing existing capture - Goal

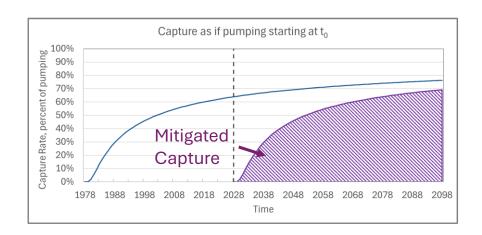
Hypothetical Capture for a well that has pumped since 1978





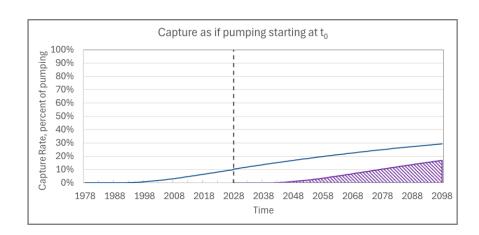


NDWR Preferred goal

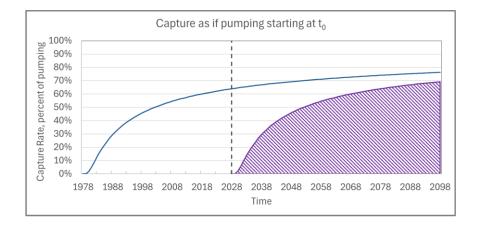


# Visualizing management goal for varying capture rates

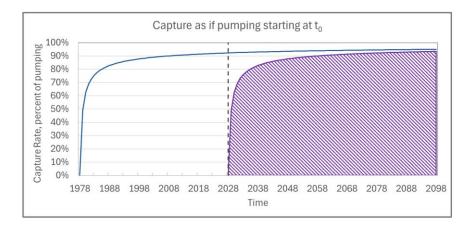
Low Capture - 25% after 100 yrs



Moderate Capture - 75% after 100 yrs



High Capture - 95% after 100 yrs



#### DRAFT

#### Suggested Potential

#### Humboldt River Conjunctive Management Process & Timeline

Chris Mahannah, P.E., WRS

Jay Dixon, P.E., WRS

ITEM	ACTION	TIMELINE (months after
		model CMZ
		release)
1	Upper, Middle & Lower Models released to public Establishment of Capture Management Zones (CMZ) based on model results released to public	0
2	Public input, comments, critique of models, CMZ boundaries	6
3	Establish Humboldt River Conservancy District (HRCD)	12
	<ul><li>Establishment of assessment structure within CMZ's</li><li>Seek other funding sources</li></ul>	
4	NDWR notices <u>all</u> UG water right owners of legacy and future capture amount based on <u>actual</u> pumping amounts	12
	<ul> <li>Establish threshold capture amounts where mitigation is required</li> </ul>	
	<ul> <li>Possible exemption for diminutive domestic &amp; stock water</li> </ul>	
5	Noticed UG water right owners given opportunity to comment or refute capture estimates & mitigation requirements	24
	<ul> <li>Need for standardized methods of rebuttal evidence, models, methods, etc?</li> <li>Is NDWR staffed sufficiently to review rebuttal evidence?</li> </ul>	

6	Noticed UG water rights owners or HRCD must submit mitigation plans for groups of water right owners for replacement water in time, location & amount	36
	<ul> <li>Voluntary purchase/retirement of UG or STR sources</li> <li>Augmentation well(s) pumping to river</li> <li>ASR projects</li> <li>Storage releases to river</li> <li>Deficit irrigation practices</li> <li>Surface water acquisition left in river to replace capture <ul> <li>Order 1329</li> </ul> </li> <li>Voluntary monetary compensation to injured water rights</li> <li>Others?</li> </ul>	
7	<ul> <li>Water right owners and/or HRCD not complying with submitting a mitigation plan potentially subject to full or partial curtailment based on hydrologic conditions</li> <li>Possibility of curtailment needs to be real for motivation to mitigate</li> <li>Does NDWR have legislative authority to curtail based on conflict under 534.110(6)?</li> </ul>	36
8	NDWR reviews & approves or rejects mitigation plans	42
9	Water right owners and/or HRCD implement mitigation plans	60
10	<ul> <li>Water right owners and/or HRCD failing to implement mitigation plans potentially subject to full or partial curtailment</li> <li>Possibility of curtailment needs to be real for motivation to mitigate</li> <li>Does NDWR have legislative authority to curtail based on conflict under 534.110(6)?</li> </ul>	60