

Grand Prairie

River Flows and Withdrawals

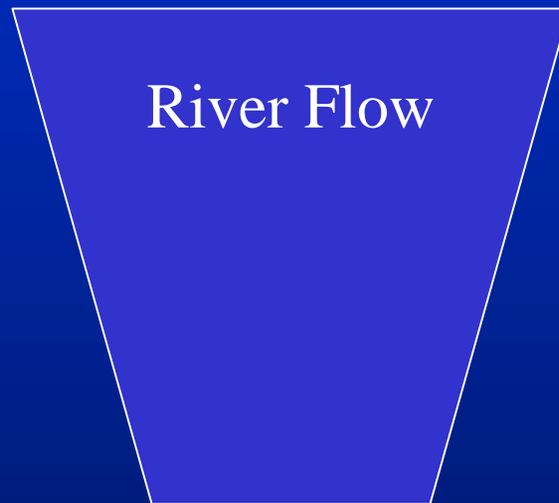
Background

- 💧 Limited awareness of the relationship between White River Flows and withdrawals exist among many people
- 💧 This presentation will provide information on a relative scale to permit the viewer to become more aware of the potential impacts on the White River from water withdrawals

You will see:

- 💧 A series of slides that show the flow in the White for each month of the year and the planned withdrawals by month
- 💧 The ratio of the flow to withdrawal is 1:1. In other words, the visual size of the withdrawal to the flow is correct

White River - Mean Monthly Flow January

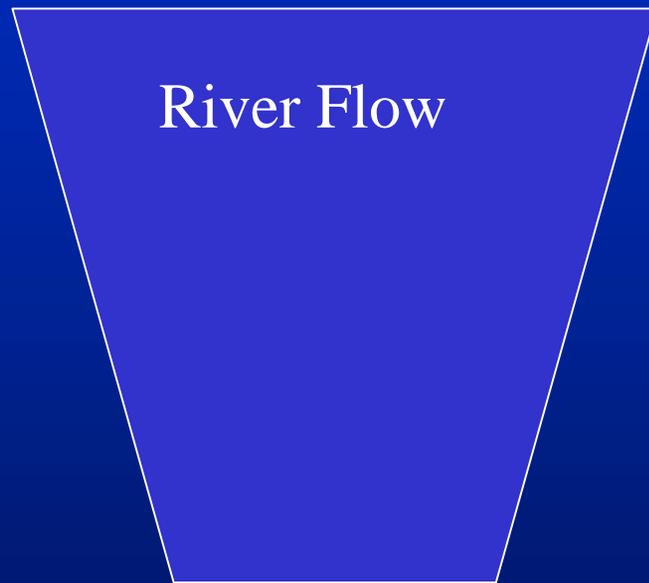


2,010,000 acre feet



17,000 acre feet

White River - Mean Monthly Flow February



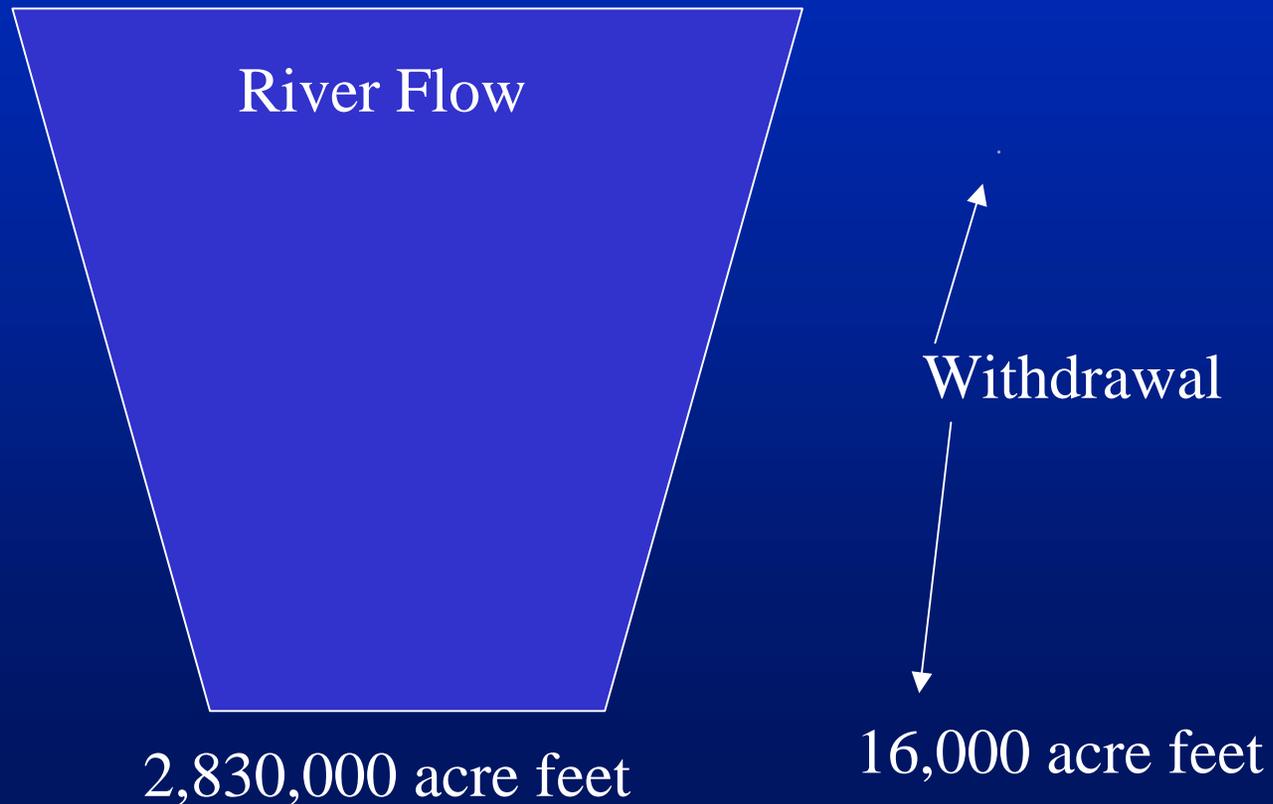
2,100,000 acre feet



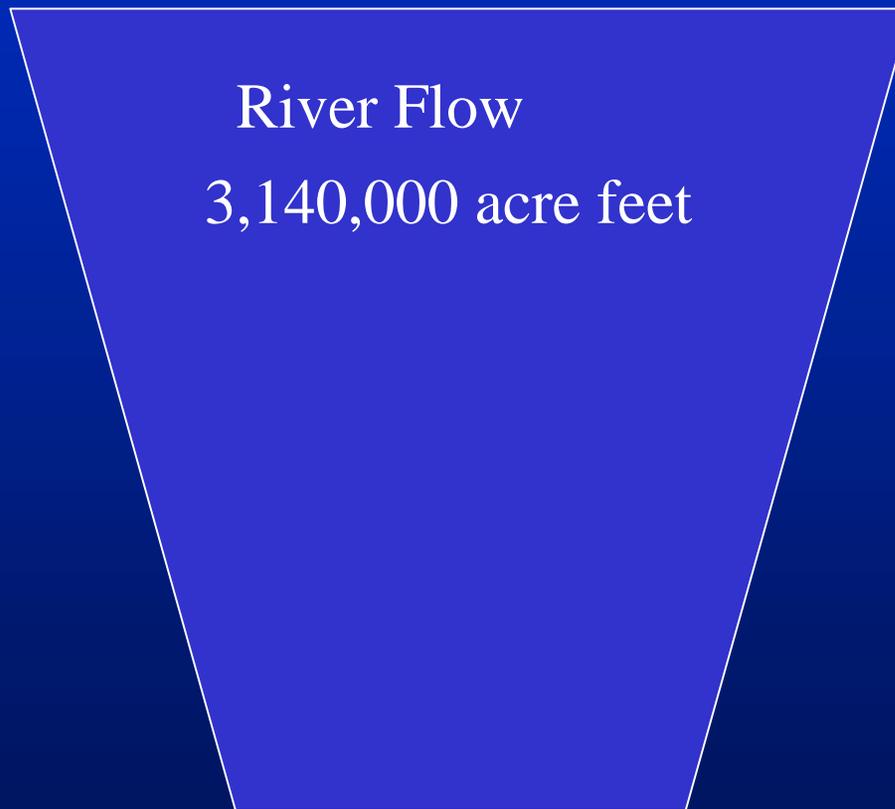
Withdrawal

15,500 acre feet

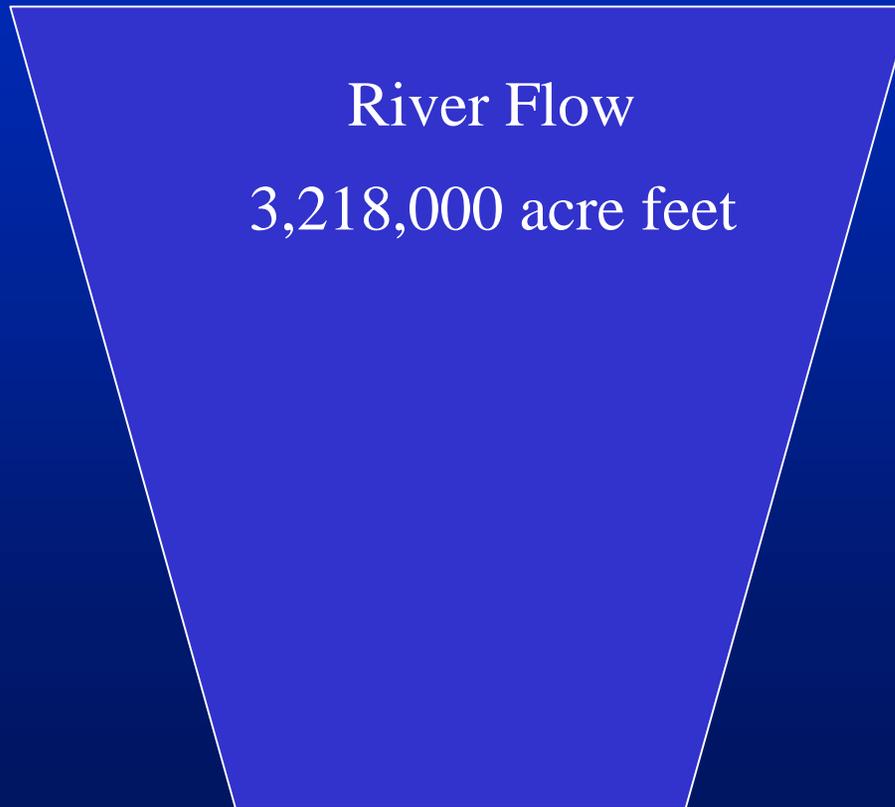
White River - Mean Monthly Flow March



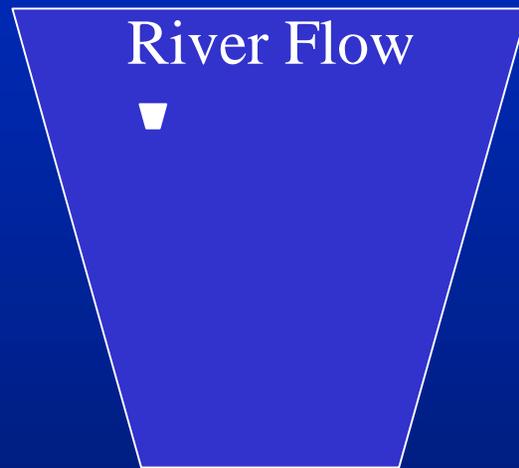
White River - Mean Monthly Flow April



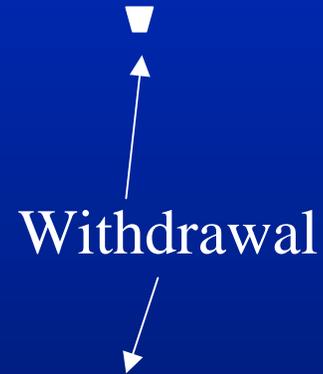
White River - Mean Monthly Flow May



White River - Mean Monthly Flow June

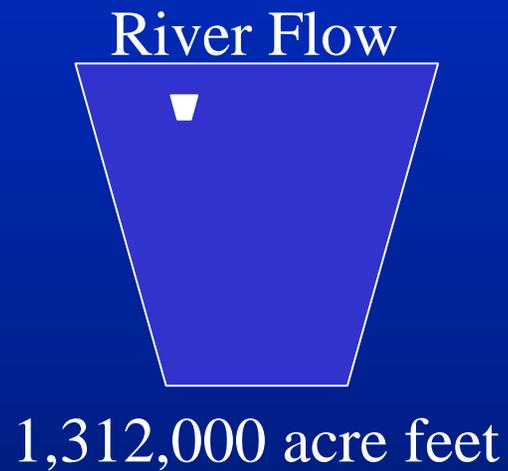


1,800,000 acre feet



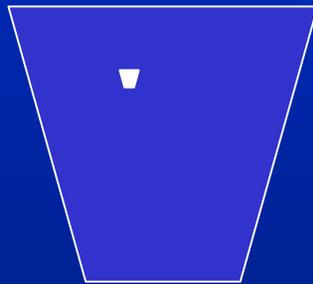
89,500 acre feet

White River - Mean Monthly Flow July



White River - Mean Monthly Flow August

River Flow



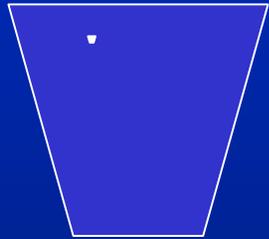
1,118,000 acre feet

Withdrawal

89,500 acre feet

White River - Mean Monthly Flow September

River Flow



895,000 acre feet

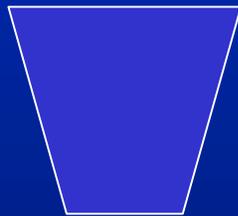
Withdrawal



29,500 acre feet

White River - Mean Monthly Flow October

River Flow



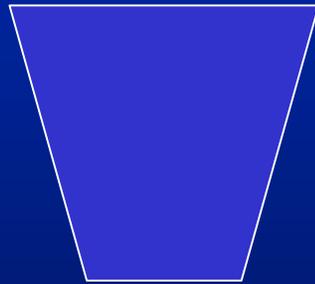
851,000 acre feet



3,600 acre feet

White River - Mean Monthly Flow November

River Flow

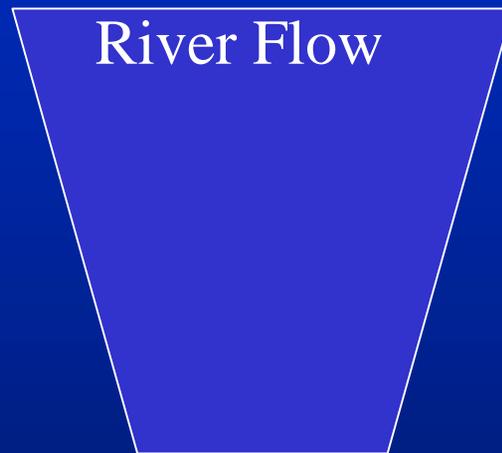


1,096,000 acre feet

Withdrawal

1,300 acre feet

White River - Mean Monthly Flow December



1,800,000 acre feet

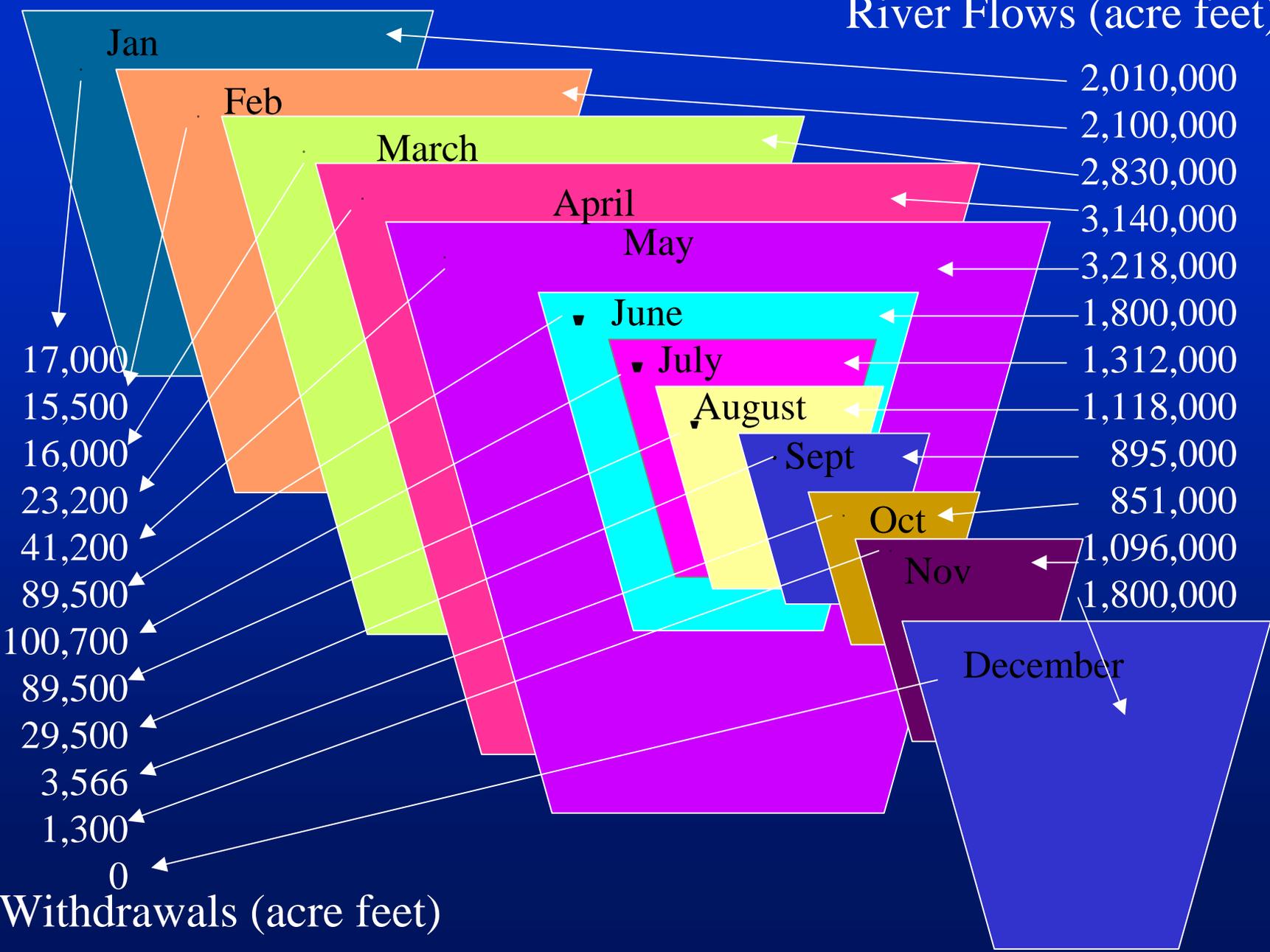
Withdrawal

NONE

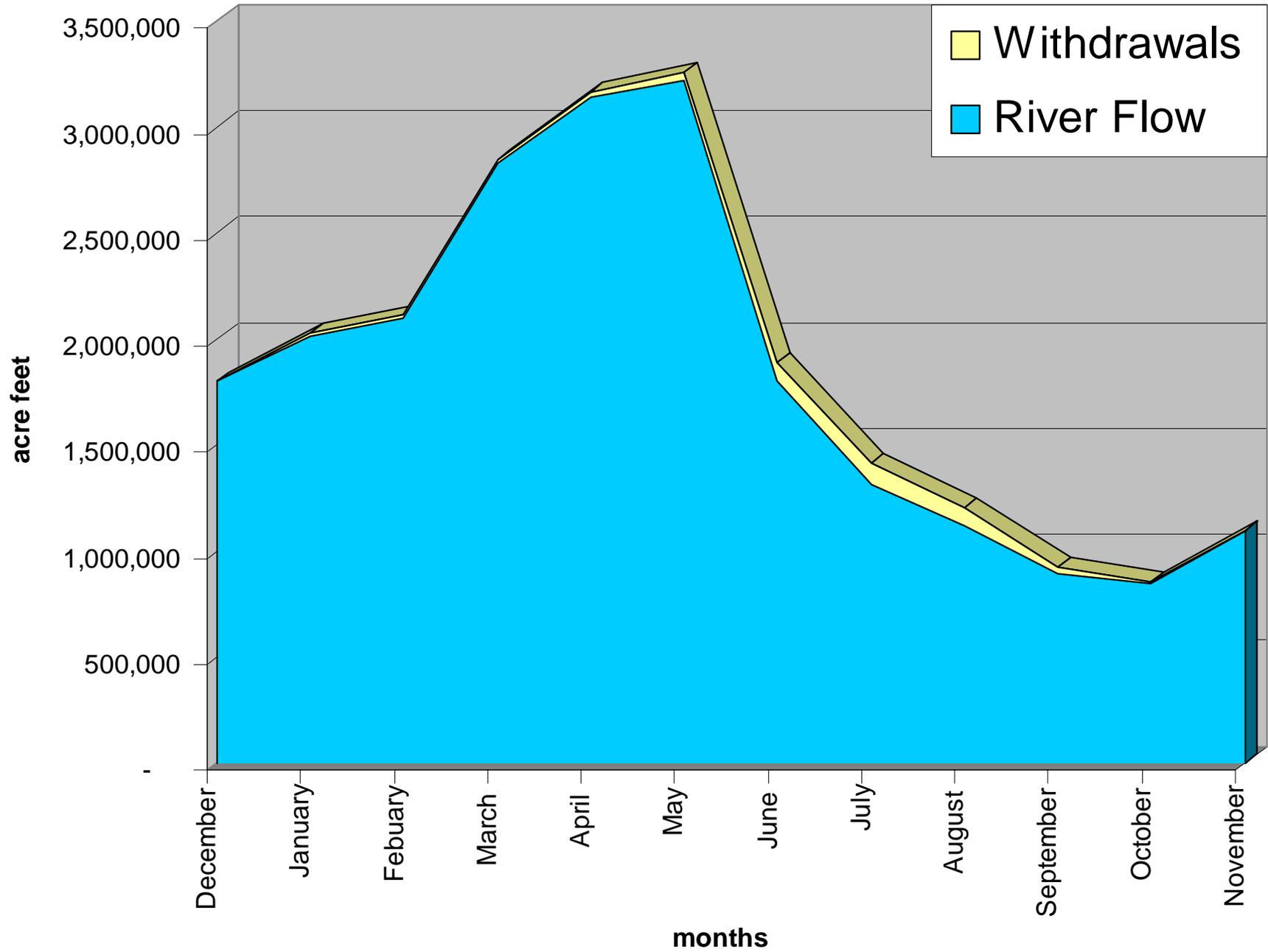
The next series:

- 💧 The next series of slides show the flow, then the withdrawals by month
- 💧 The information is presented such that one can maintain a relative perspective of flow and withdrawals during the year.

River Flows (acre feet)



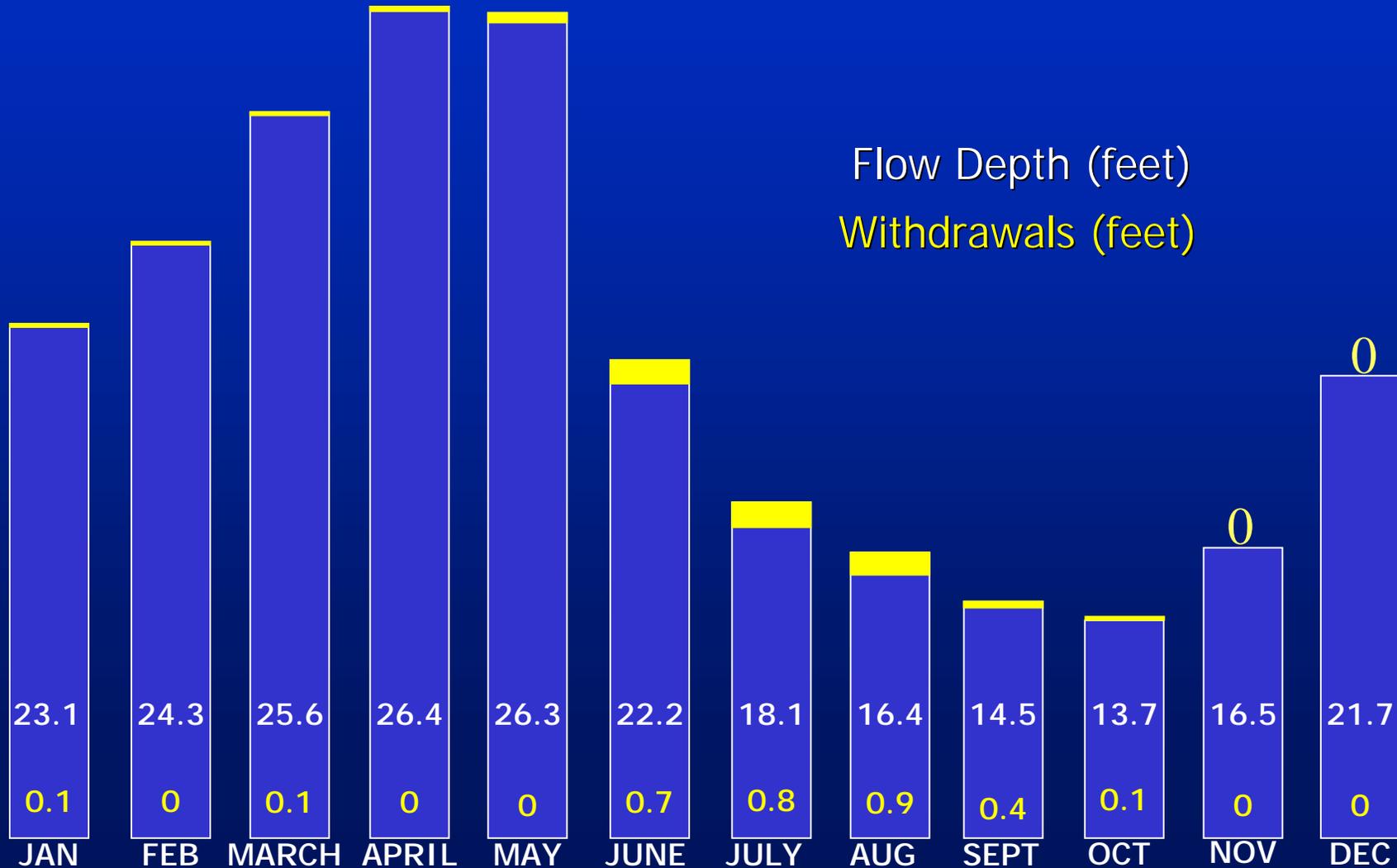
Withdrawals (acre feet)



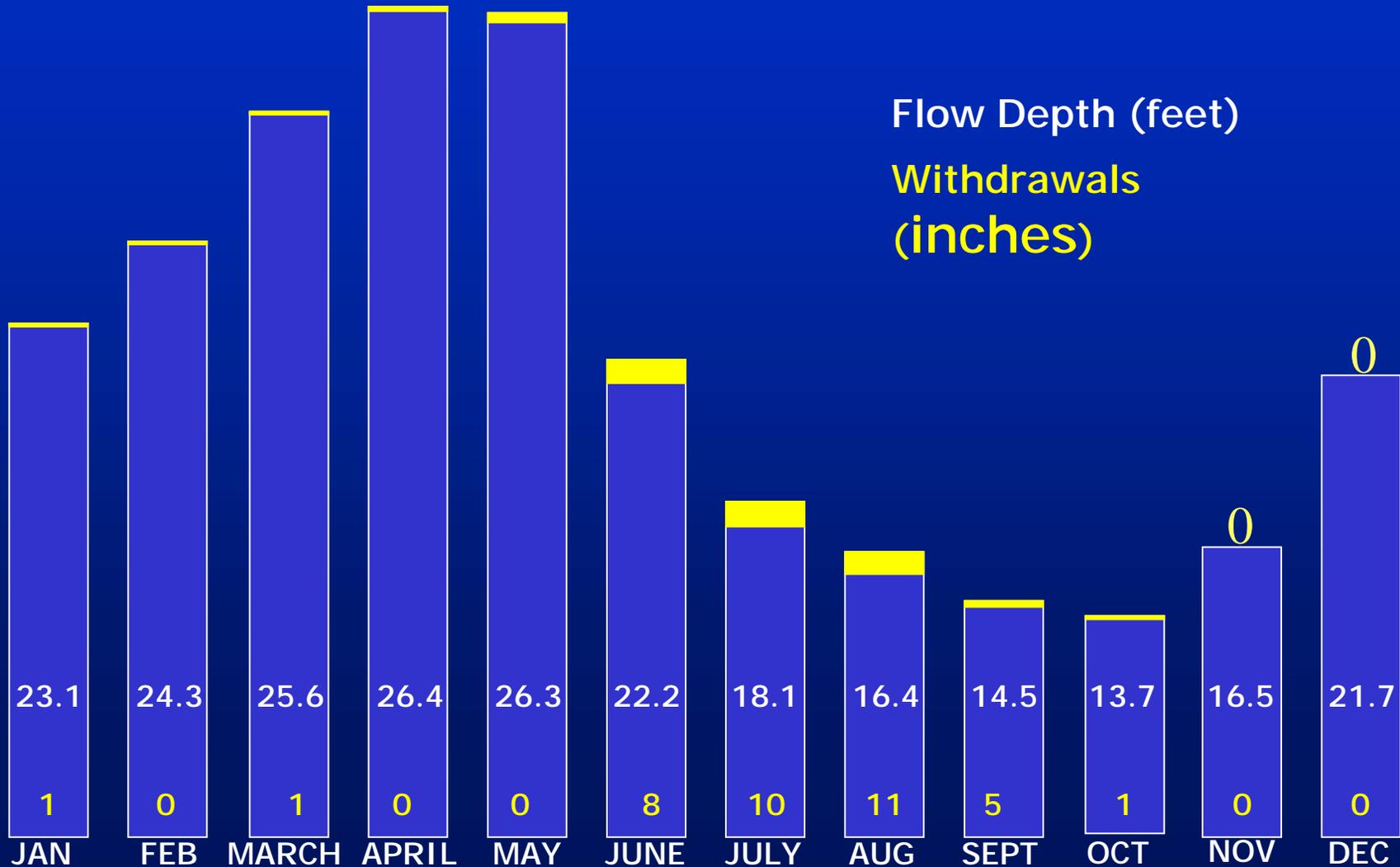
The next series of slides:

- Represent the depth of water in the White River and the depth of water withdrawn by month

Depth of Flow by Month

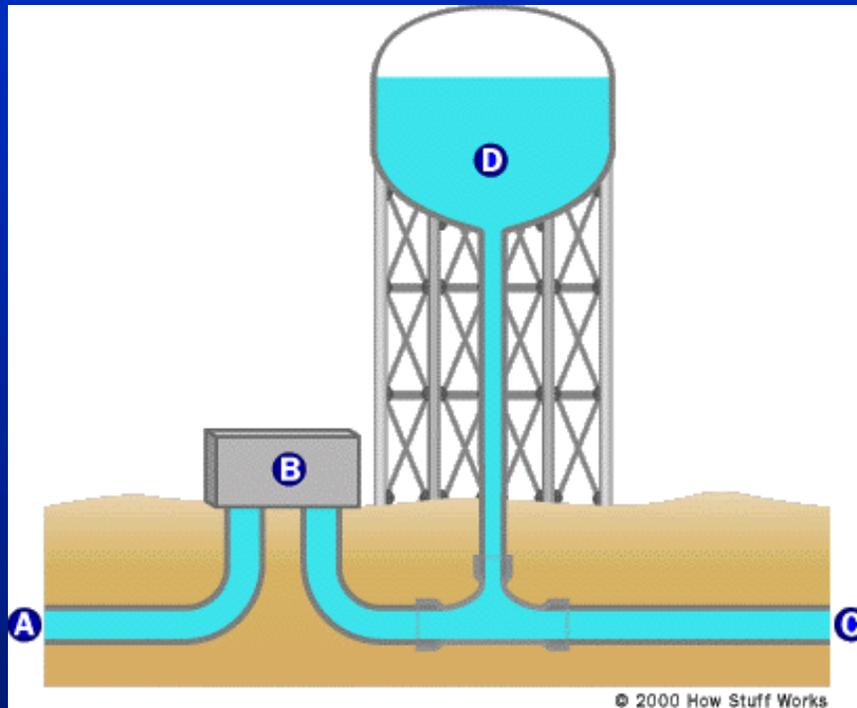


Depth of Flow by Month



2.5 million tanks flow down the White in January

1/4 tank is withdrawn (less than 1%)



250,000 Gallon Storage Tank

Jan	2534420	21482
Feb	2934592	21715
March	3568197	20164
April	4092453	30246
May	4059105	51960
June	2351396	116639
July	1654973	127031
August	1409907	112917
September	1166392	38466
October	1073329	4498
November	1428520	1706
December	2273068	0
Total	28546351	546824

Slightly more than 1/2 million tanks will be removed. Almost 28 million tanks flow down the White River each year.

Water Facts

“The two 10 foot pipes will suck the White River dry”
is NOT TRUE



Water Facts

January

Withdrawal

River Flow = 40 -10 foot pipes

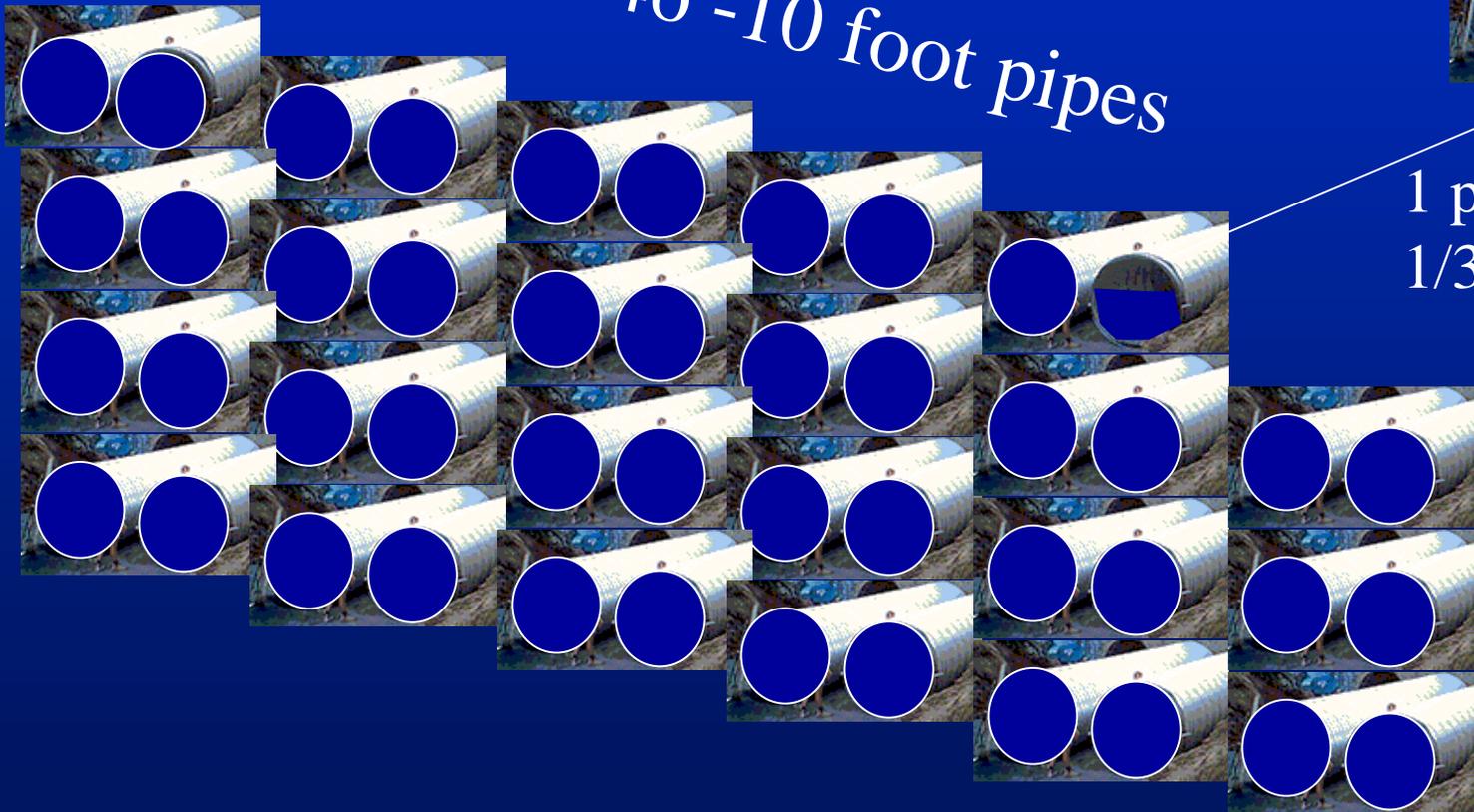


1 pipe,
1/3 full

Water Facts

February

River Flow = 46 -10 foot pipes



Withdrawal

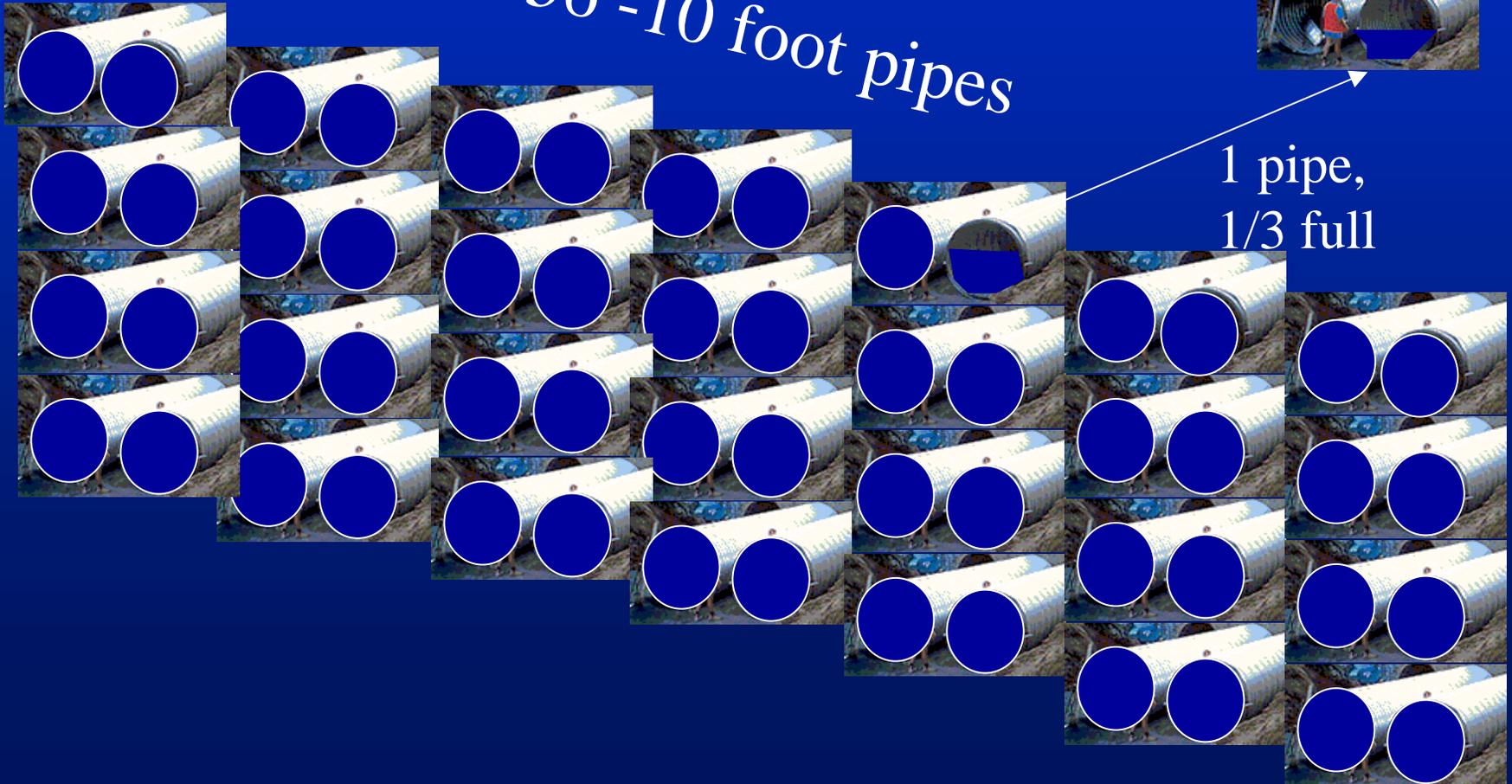


1 pipe,
1/3 full

Water Facts March

Withdrawal

River Flow = 56 -10 foot pipes

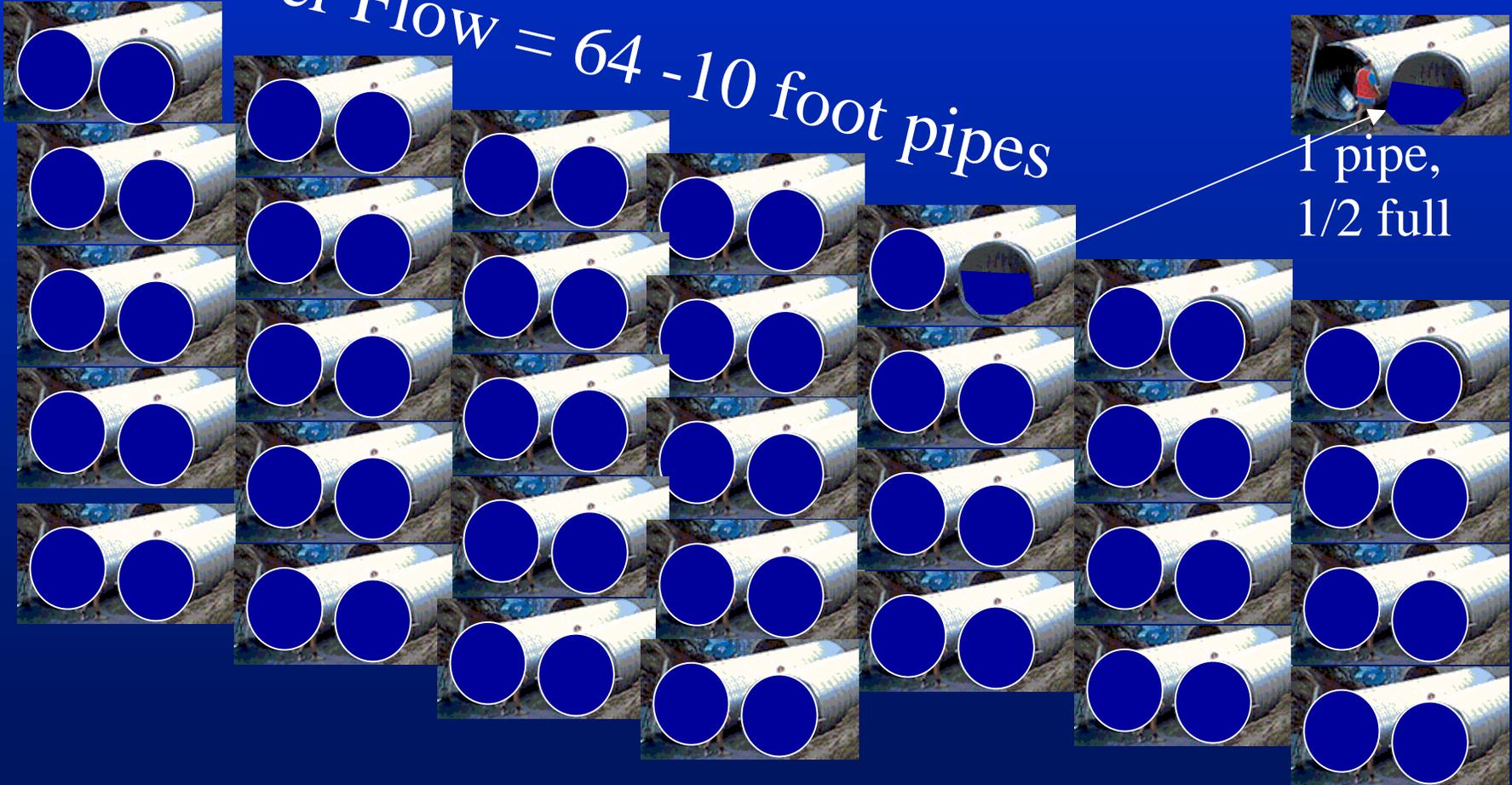


Water Facts

April

Withdrawal

River Flow = 64 -10 foot pipes

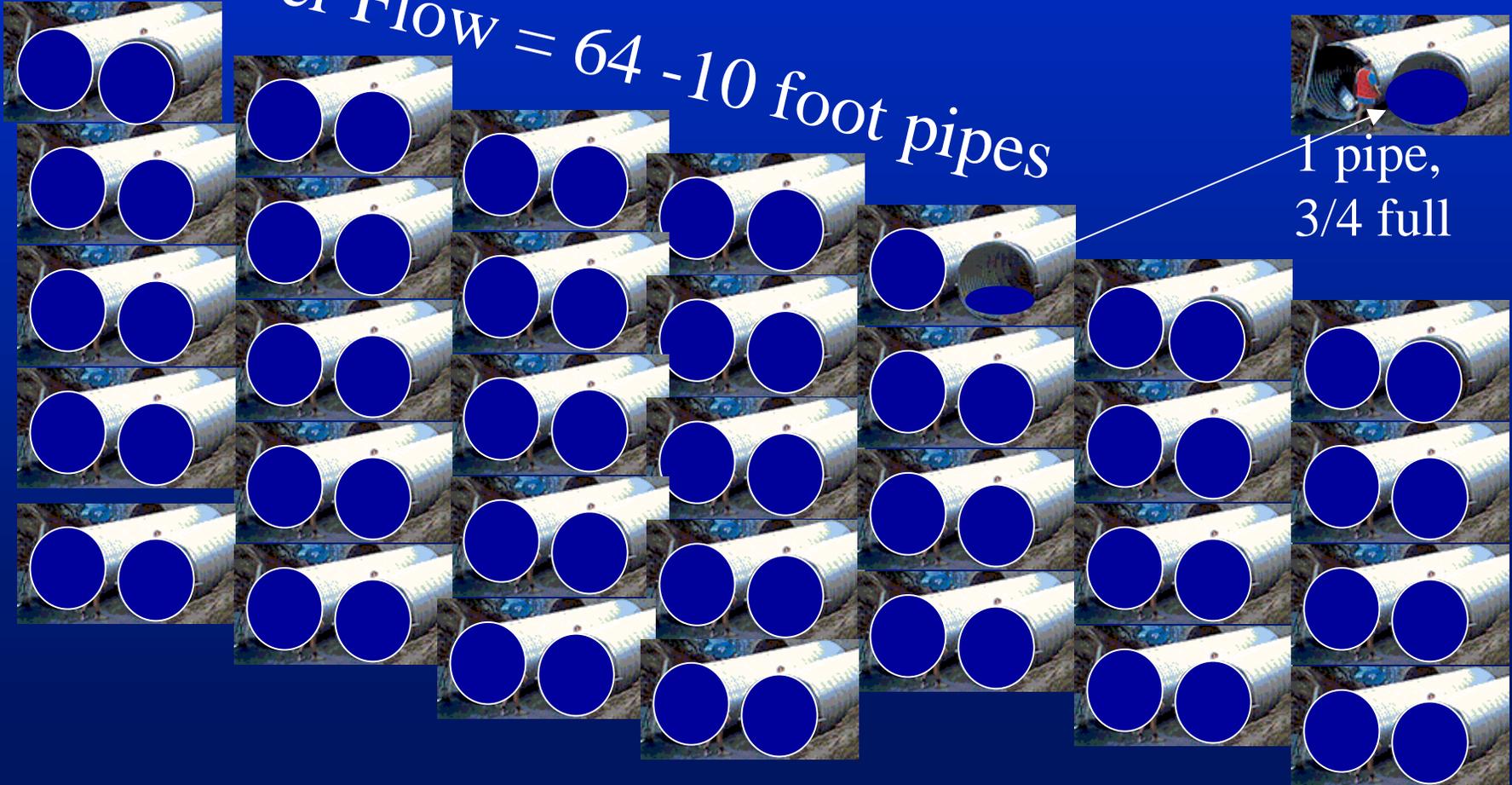


Water Facts

May

Withdrawal

River Flow = 64 -10 foot pipes



Water Facts

June

Withdrawal

River Flow = 37 -10 foot pipes



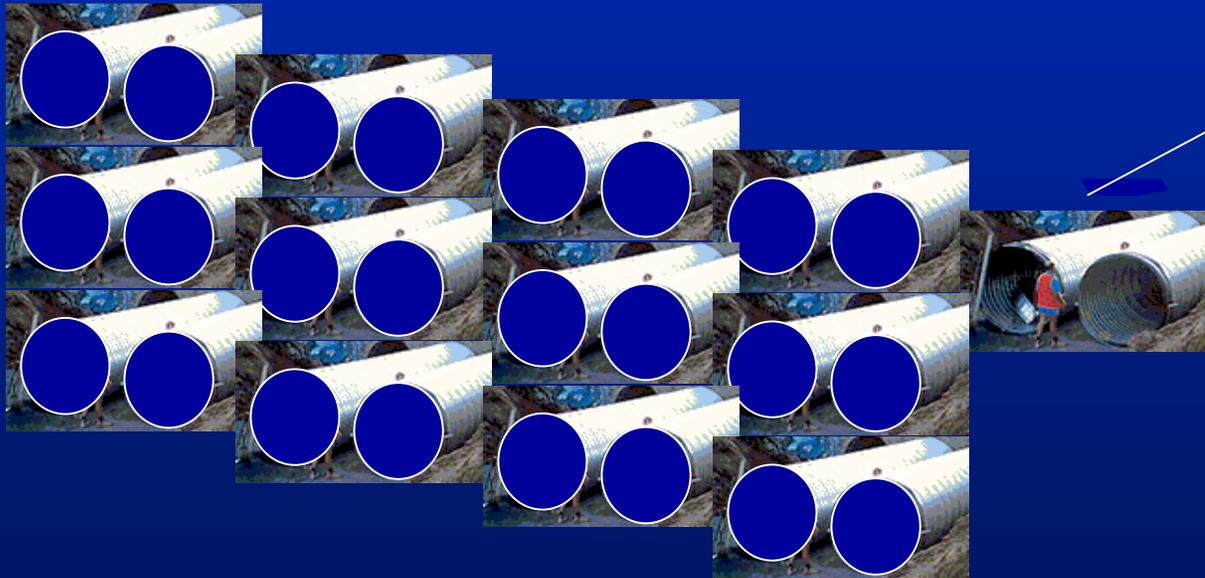
1 pipe full &
1 pipe 3/4 full

Water Facts

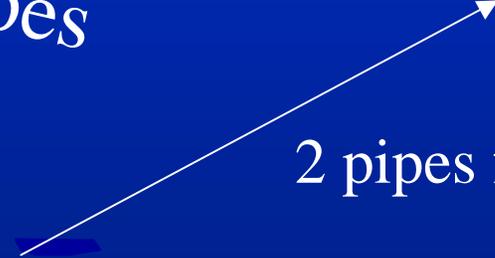
July

Withdrawal

River Flow = 26 -10 foot pipes



2 pipes full

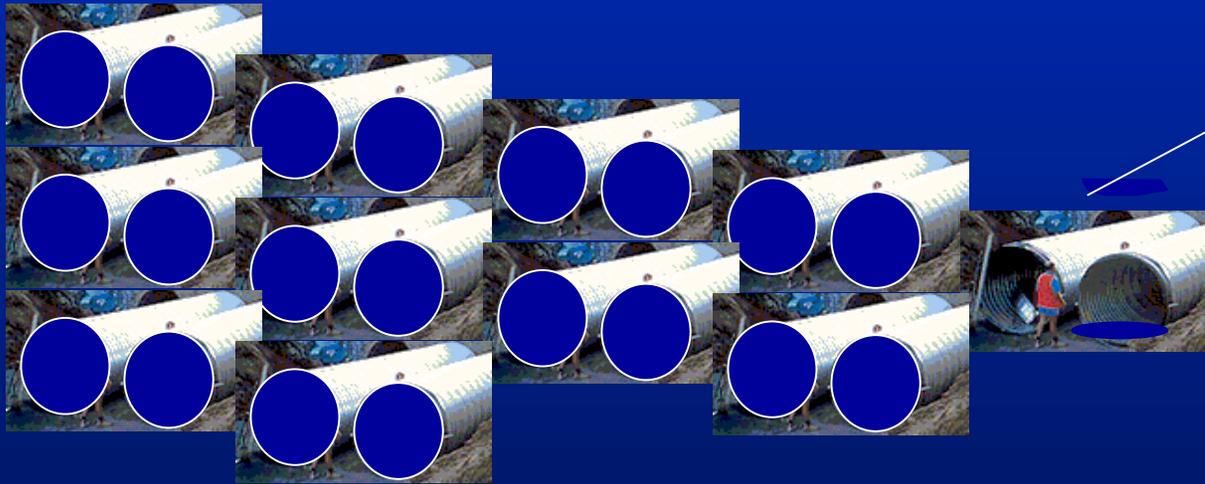


Water Facts

August

Withdrawal

River Flow = 22 -10 foot pipes

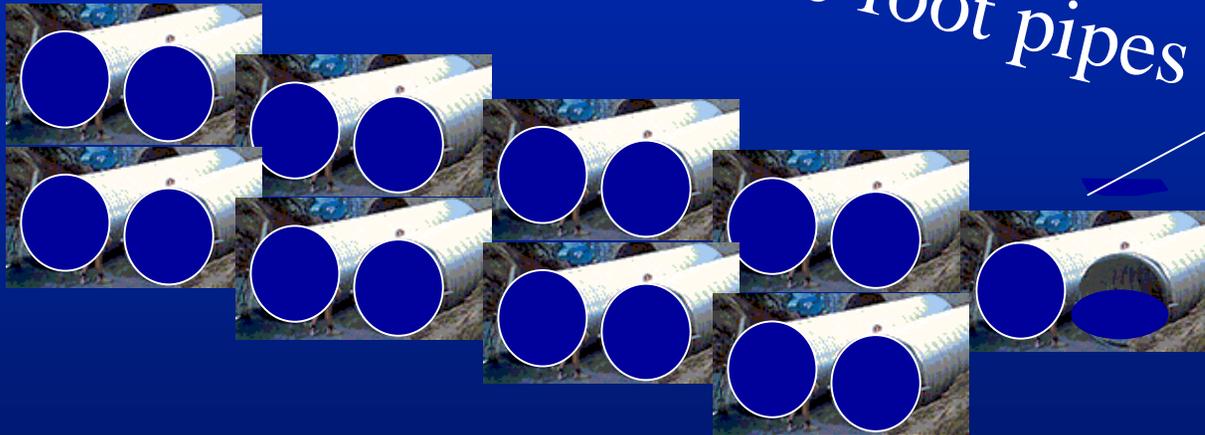


1 pipe full &
1 pipe 3/4 full

Water Facts September

Withdrawal

River Flow = 18 -10 foot pipes



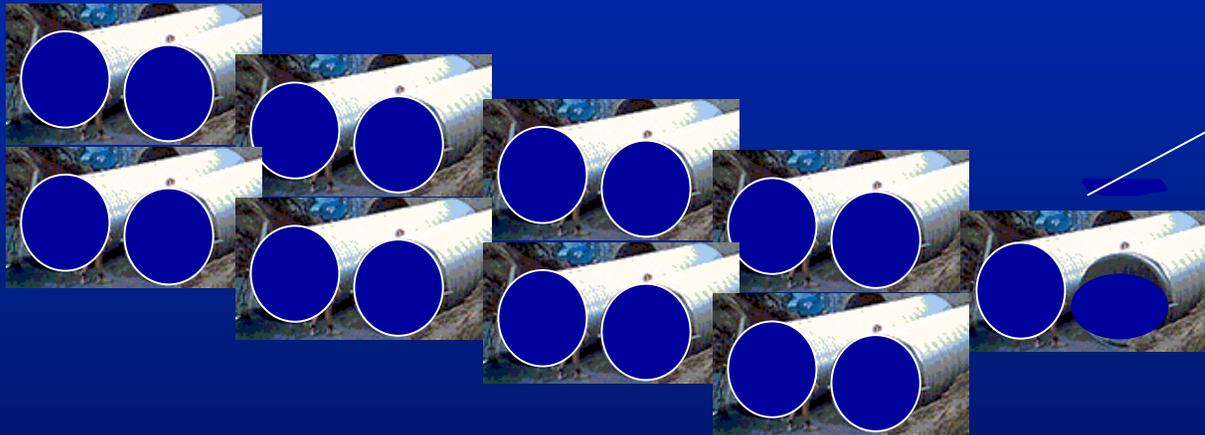
1 pipe at 2/3 full

Water Facts

October

Withdrawal

River Flow = 18 -10 foot pipes



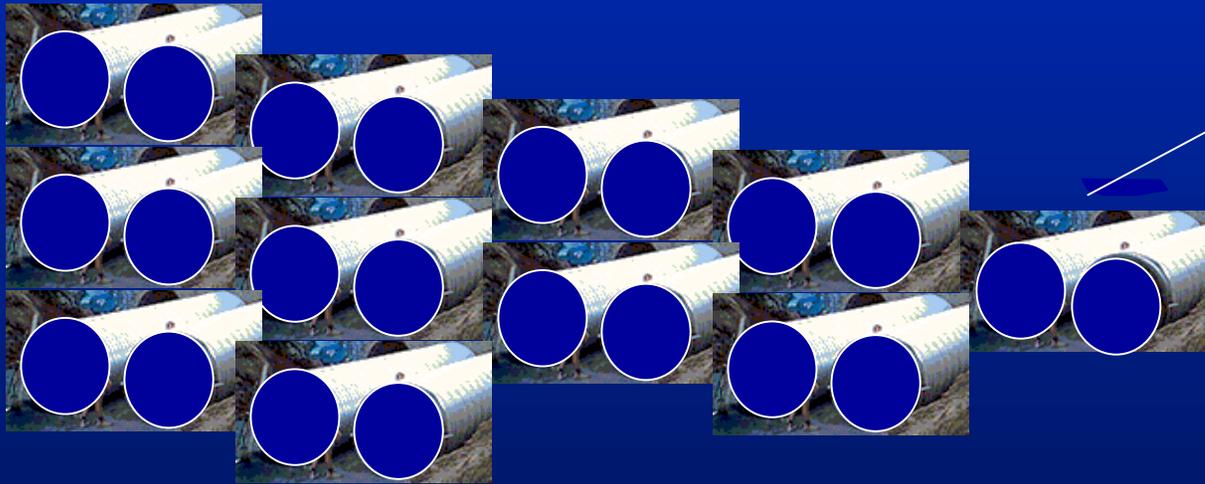
1 pipe, a trickle

Water Facts

November

Withdrawal

River Flow = 22 -10 foot pipes

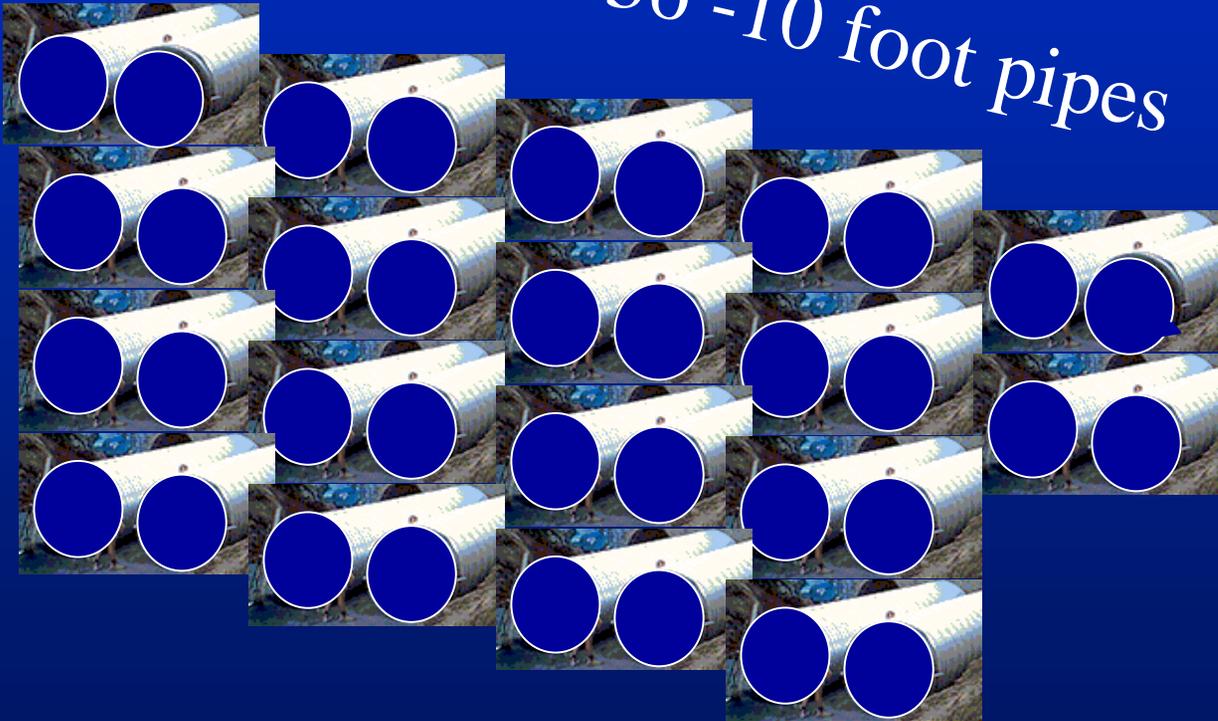


1 pipe, a trickle

Water Facts December

Withdrawal

River Flow = 36 - 10 foot pipes



NONE

Water Facts

“Twin 10-foot diameter pipes will suck away **Billions** of gallons of water”

The **January flow** in the White River is **655 Billion** gallons.

In January there is about **5 Billion** gallons proposed to be pumped.

Which is **less than 1%** of the flow in the White River.

Water Facts

139,145,078,548 gallons proposed for yearly withdrawal

7,226,285,383,181 gallons flow in the White River

That is about **140 Billion** gallons of withdrawal during the year

From over **7 Trillion** gallons of flow

or

140 **Billion** gallons from over 7200 **Billion** gallons

White River

Month	Avg Monthly Flow (cfs)	Avg Monthly Flow (gal/min)	Avg Monthly Flow (gal/day)	Avg Monthly Flow (gal/month)
Jan	32,680	14,667,797	21,121,627,795	654,770,461,651
Feb	37,840	16,983,765	24,456,621,658	684,785,406,413
Mar	46,010	20,650,714	29,737,028,606	921,847,886,798
Apr	52,770	23,684,812	34,106,129,093	1,023,183,872,784
May	52,340	23,491,815	33,828,212,938	1,048,674,601,066
Jun	30,320	13,608,556	19,596,320,525	587,889,615,744
Jul	21,340	9,578,054	13,792,397,098	427,564,310,026
Aug	18,180	8,159,748	11,750,036,515	364,251,131,971
Sep	15,040	6,750,418	9,720,602,266	291,618,067,968
Oct	13,840	6,211,821	8,945,022,298	277,295,691,226
Nov	18,420	8,267,467	11,905,152,509	357,154,575,264
Dec	29,310	13,155,237	18,943,540,718	587,249,762,270
			Total Gallons/Year	7,226,285,383,181

Grand Prairie Pump Station Withdrawal Rate

Month	Avg Monthly Flow (cfs)	Avg Monthly Flow (gal/min)	Avg Monthly Flow (gal/day)	Avg Monthly Flow (gal/month)
Jan	277	124,326	179,029,709	5,549,920,988
Feb	279	125,373	180,537,781	5,055,057,880
Mar	259	116,397	167,611,449	5,195,954,908
Apr	390	174,894	251,848,051	7,555,441,522
May	670	300,567	432,816,710	13,417,318,008
Jun	1504	675,191	972,275,665	29,168,269,963
Jul	1638	735,335	1,058,882,095	32,825,344,951
Aug	1456	653,348	940,821,589	29,165,469,258
Sep	496	222,770	320,788,492	9,623,654,770
Oct	58	26,032	37,486,365	1,162,077,319
Nov	22	9,874	14,218,966	426,568,982
Dec	0	0	0	0
Total Gallons/Year				139,145,078,548