# Dedicating Return Flows to the Bay

#### Gregg Eckhardt

Senior Analyst, Production and Treatment Operations



10<sup>th</sup> Anniversary Conference January 23, 2020







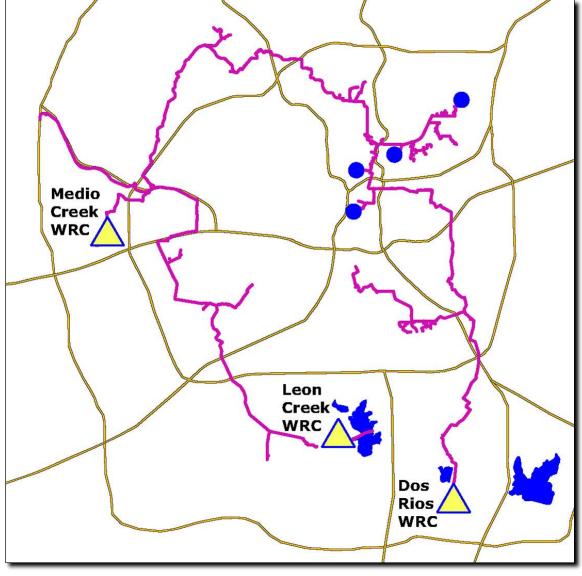
#### Bed and Banks Basics

- An authorization from the State of Texas to use the "Bed and Banks" of a river as a natural pipeline to transport privately developed groundwater
- Without a bed and banks authorization, discharges become property of the State
- SAWS seeks to dedicate 50,000 af/yr for benefit of San Antonio River and San Antonio Bay



# SAWS' Recycled Water System



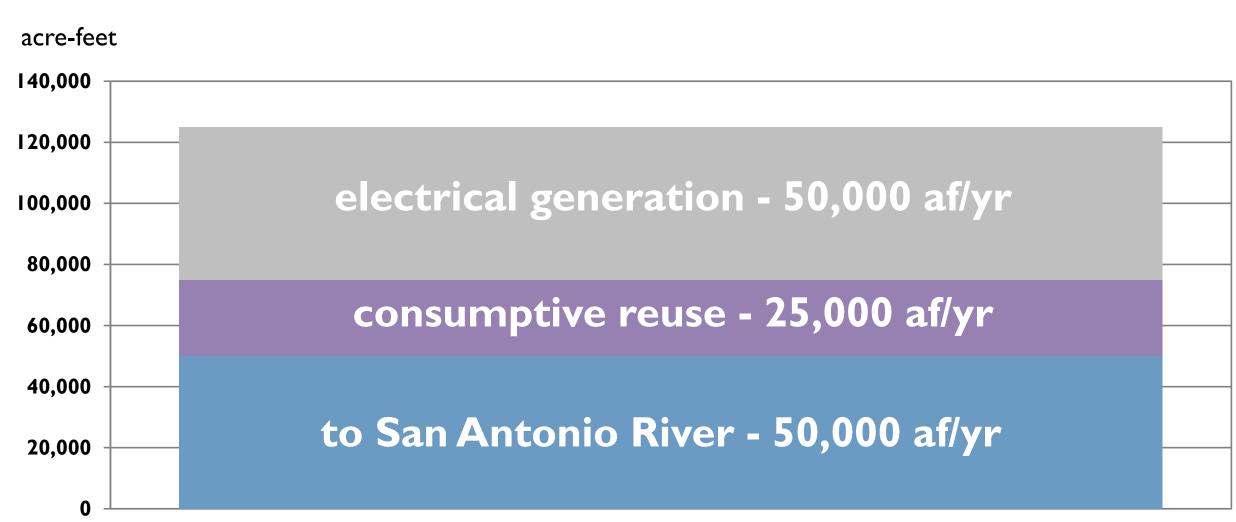








#### Effluent Allocation







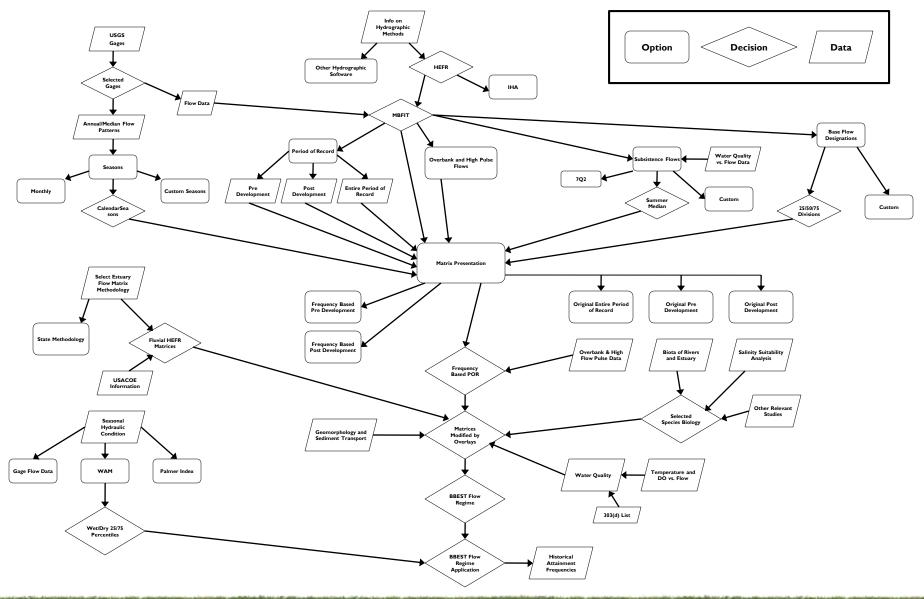
# Legislative Programs

To address flows in San Antonio and Guadalupe River basins:

- 2001 Senate Bill 2 Texas
   Instream Flows Program
- 2007 Senate Bill 3
   Environmental Flows Program



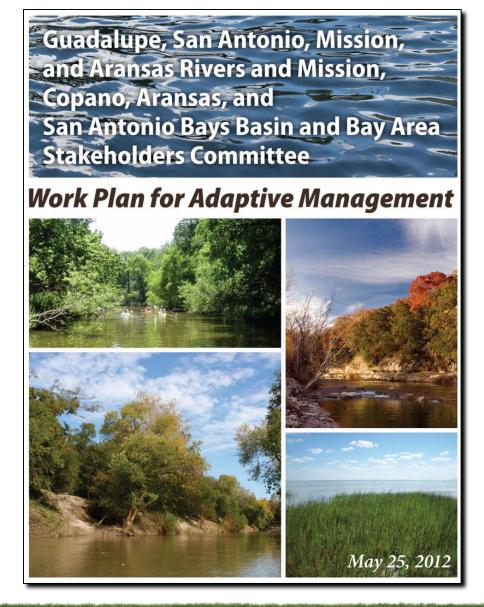
# E-Flows Science Team Decision Diagram





# SB3 Stakeholder Work Plan

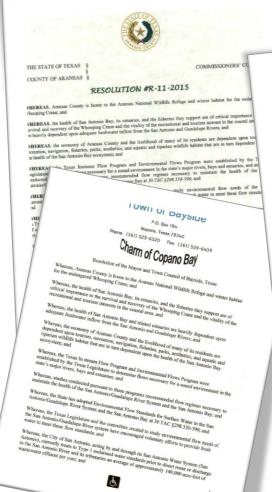
 Outlines voluntary strategies to meet instream flow standards





#### MAKING SAN ANTONIO WA

# Regional Support



WHEREAS, the economy of the City of Inglesión and the livelihood of many of its WHEREASA, we convolvy of me Usy or impenses and the inventors of many of me residents are dependent upon recreation, navigation, parks, and aquatic and riparion wildlife habitat that are in turn dependent upon the health of our buys; and WHEREAS, the Texas Insteam Flow Program and the Environmental Flows Program WILLEAGAN, the Texas represent Your Program and the Environmental Traves Program were established by the Texas Legislance to determine those necessary for a sound conference in the state's major rivers, boys and emasters; and WHEREAS, studies conducted pursuent to these programs recommended flow regimes necessary to maintain the health of the San Astonico Guallalpee River System and the San Astonico Bay that directly impact the health of our surrounding bays; and WHEREAS, the Texas Legislature and the committee created to study environs VIRIABANA, HE 1020S LAGRISHMEN HIS description of the San Astronio Gaude River System have encouraged voluntary efforts to provide fresh water to meet these flow standards; and WHEREAS, instrum water use is a beneficial utilization of water and includes WHEREAS, instream water use is a bounficial utilization of water and includes recentions, game preserves, ande purposes, water quality pretection, aquation and patient habitat, fleshoward refinitions for boys and estuarion, and any other instream une recognized by law, and of which contribute directly or indirectly to auxoum of the economy and evolugy of the City of baselucities. WHEREAS, the City of Ingleride believes that the San Antenio Water System has taken a positive step to guarantee the visually needed freshwater inflows to our buys and entancies for the manual benefit of all doversecous interests, the critizens of Inglecide and the critical control of the control of the control of the control of the critical control of the critical control of the control of the critical control

ATTEST:

is estuaries, and the fisheries they support are of ck, and the vitality of the recreational acc. Whereas Armana County is home to the Armana National Wildlife Refuge and winter habitat for the confungment Tohongaring Crane; and Antonio and Guadali livelihood of many es, parks, aesthetics, Whereas, the Texas Instrume Flow Program and Emvironmental Flows Program were established by the Texas Legislance to determine flows recessary for a second coverence in the state's unifor fivers, topy and entanglish and City of San Australia, setting by and through its San Australia Water System, softy stream to Type I reclaimed water standards Foor to direct some order. The Company of the Company of

han 90% of this reclaimed water is currently derived from San Antonio's understant and

RESOLUTION NO. R-1526 RESOLUTION OF THE BOARD OF DIRECTO
RIVER AUTHORITY IN SUPPORT OF APPLIC
CAM ANTONIO WATER CVETCH TO THE KIVER AUTHORITY IN SUPPORT OF APPLIC SAN ANTONIO WATER SYSTEM TO THE ENVIRONMENTAL QUALITY FOR A AUTHORIZATION QUALITY FOR A

Whereas, the San Antonio River Authority (SARA) is a a body politic and corporate, vested with all the authority and by special legislative act pursuant to Section 59, Article 1 Whereas, SARA's powers and authority include, but not in those parts of all rivers, streams and tributaries thereof which bounderlose; and

ereas, SARA's Board of Directors has adopted the go eras, SARA's Board of Directors has adopted the got exship, stewardship and expertise; enhancing community accor of the San Antonio River and its tribularies; and at NADA's estantions become and about accountment through SARA's statutory boundaries and downstream through SHRAN 3 MEMORY VOUNDARIES and GOWNSTEAM INTOGRA addupe River Basin and into the San Antonio Bay and the San Antonio River Authority is a co-founder Bay Partnership, a regional, non-profit, stakeholder or the San Antonio Bay/Guadalupe Estuary; and

e mission of the San Antonio Bay Pattnership inc working partnership of committed stakeholders of natural resources of the San Antonio Bay System

is County, which has coastline proximate to the to the Aransas Nati Wildlife Refuge and the

nio Bay ecosystem

**RESOLUTION NO. 2015-07-04** A RESOLUTION OF THE CITY OF GOLIAD, TEXAS ELECTING TO E

WHEREAS the Arensas National Wildlife Refuge is located on the San A winter home for the endangered Whooping Crane; and WHEREAS health of San Antonio Bay and its estuaries are of critical impo

and recovery of the Whooping Crane; and WHEREAS the health of San Antonio Bay and related estuaries are hear. whether the meaning on the neutral one was retained anywhite are neutral adequate freshwater inflow from the San Antonio and Guadalupe Eivers; and

WHEREAS, the Texas Instream Flow Program and Environmental Flo WHEREAS, the lexes inscreen riow program and cheening into "Programs") were established by the Texas Legislature to determine flows. sound environment in the state's major rivers, bays and estuaries; and

necessary to maintain the health of San Antonio/Guadalupe River System and 6 Described you distribute the meanth of part emonstroysushashipe areas appared and gray and the State has adopted Environmental Flow Standards for Surface W unt one untrates non-ecopyes conformation claw acerum on autration of Antonio/Guadalupe River System and the San Antonio Bay at 30 Texas Admili,

WHEREAS, the Texas Legislature and the committee created to study environmental flow needs WHEREAS, the 1 exast Linguisture and the committee creates to study enveronmental root incost of the San Antonio/Guadalupe River System have encouraged voluntary efforts to provide fresh of the San Antonio/Guadalupe River System have encouraged voluntary efforts to provide fresh of the San Antonio/Guadalupe River System have encouraged voluntary efforts to provide fresh of the San Antonio/Guadalupe River System have encouraged voluntary efforts to provide fresh of the San Antonio/Guadalupe River System have encouraged voluntary efforts to provide fresh to the San Antonio/Guadalupe River System have encouraged voluntary efforts to provide fresh to the San Antonio/Guadalupe River System have encouraged voluntary efforts to provide fresh to the San Antonio/Guadalupe River System have encouraged voluntary efforts to provide fresh to the San Antonio/Guadalupe River System have encouraged voluntary efforts to provide fresh to the San Antonio/Guadalupe River System have encouraged voluntary efforts to provide fresh to the San Antonio/Guadalupe River System have encouraged voluntary efforts to provide fresh to the San Antonio/Guadalupe River System have encouraged voluntary efforts to provide fresh to the San Antonio River System (San Antonio River System Sy to meet these flow standards; and

WHEREAS, the City of San Antonio, acting by and through its San Antonio Water System WHENEAS, one city or can innovative, acting by one turnough its can innovate inspired (SAWS), currently treats to Type 1 reclaimed water standards prior to direct reuse or discharge (SAWS), currently treats to type 3 reclaimed water standards prior to direct relate or originately to the San Antonio River and its tributaries an average of approximately 340,000 acre-feet of

WHEREAS, the Guadalupe-Blanco River Authority desires to capture 50,000 acre-feet of SAWS WHEREAS, the Guadelupe-Bianco River Authority desires to capture 30,000 acre-sect of 36405 efficient discharged into the San Antonio Biar that would otherwise reach the San Antonio Bay ensurest discharged into the 2an Antonio Airer that would otherwise reach the 2an Antonio Bay and SAWS desires to ensure that the water not be diverted and sold to non-permit holders by

WHEREAS, SAWS, in creder to protect the water it has discharged, is applying for a Bed and WHENERS, JANUS, IN CITIES TO PROTESS YOU WASTERN, THE MACHINERY, A SPAN Banks Authorization with TCEQ and desires assistance with this process; and

WHEREAS, the City of Gollad believes that SANS has taken a positive step to guarantee the METHERIAN, the City or school delevers that SANSS has based a posture step to guarantee the vitally needed freshwater inflows to our bays and estuaries for the mutual benefit of all downstream interests and the citizens of Goliad; and

RESOLUTION NO. 2015-09

Whereas, the health of San Antonio Bay, its enturies, and the fisheries they support are of creational and tourism interests in the coastal area; and Bay and related estuaries are heavily dependent upon San Antonio and Guadalupe Rivers; and ty and the livelihood of many of its residents are cation, fisheries, parks, aesthetics, and aquatic and apon the health of the San Antonio Bay RESOLUTION NO. 2015-760 Resolution of the City Council of City of Atamasa Pacs, Texas to County is home to the Azaman National Wildlife Refuge and winter babitat for Whoretine Crame and

ereas, the health of San Antonio Boy, its estumies, and the fatherine they support are of estimate of the secretary of the Whonging Come and the visuality of the recreational stance to the survival and recommendations of the Whonging Come and the visuality of the recreational visuance to the comment area, and

Viscross, the economy of Aramas County and the livelihood of many of its residents are dependent when their interest and a register such a reg

Whereas, studies conduced pursuant to these programs recommended floor regimes recommended management to these programs recommended floor regimes recommended floor recomm

Whereas, the State has adopted Environmental Flow State description of the State has adopted Environmental Flow State description of the State Autorito Boy!

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Resolution of the Commissioners Court of Gollad County Texas

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nvironmental flow needs of y efforts to provide fresh

Whereas: Aranas County is home to the Aranas National Wildlife Refuge and winter habitat

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Signed 21 to as of July 2015 by

ACCREDITED

319 Redapara, Pouredit, TX 78382 • 1.800.242.0071 • 361.729.8445 • Fax 361.729.7681

Regional Benefits





Swan Lake Ranch





## TCEQ Process

- Staff review of application
- Declared administratively complete
- Public notice
- Opportunity for protest
- Executive Director makes recommendation
- Possible contested case hearing
- Commission decision
- Possible judicial review



# Dedicating Return Flows to the Bay

#### Gregg Eckhardt

Senior Analyst, Production and Treatment Operations



10<sup>th</sup> Anniversary Conference January 23, 2020





### Bed and Banks Goals

- Add legal certainty to policy guidance
- Support SB 3 stakeholder strategies to ensure healthy rivers, bays, and estuaries
  - Authorization to use 50,000 acre-feet per year solely for instream flow
- Ensure San Antonio retains ownership and control of all current and future groundwater based discharges
  - Authorization to use remainder for any legal purpose (in the future)