Section 1

Debt Service Payments - Non-Self Supporting G.O. Water Bonds Summary of Recommendations - House

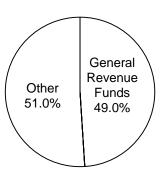
Page VI-66 Tina Beck, LBB Analyst

	2012-13	2014-15	Biennial	%
Method of Financing	Base	Recommended	Change	Change
General Revenue Funds	\$96,418,954	\$105,537,294	\$9,118,340	9.5%
GR Dedicated Funds	\$0	\$0	\$0	0.0%
Total GR-Related Funds	\$96,418,954	\$105,537,294	\$9,118,340	9.5%
Federal Funds	\$0	\$0	\$0	0.0%
Other	\$127,548,887	\$109,887,706	(\$17,661,181)	(13.8%)
All Funds	\$223,967,841	\$215,425,000	(\$8,542,841)	(3.8%)

	FY 2013 Budgeted	FY 2015 Recommended	Biennial Change		% Change
FTEs				0.0	0.0%

The bill pattern for this agency (2014-15 Recommended) represents an estimated 10.2% of the agency's estimated total available funds for the 2014-15 biennium. Funds outside the treasury total \$1.9 billion for the 2014-15 biennium, and include the Texas Water Development Fund II, and the Clean/Drinking Water State Revolving Funds.

RECOMMENDED FUNDING BY METHOD OF FINANCING



Section 1

Debt Service Payments - Non-Self Supporting G.O. Water Bonds

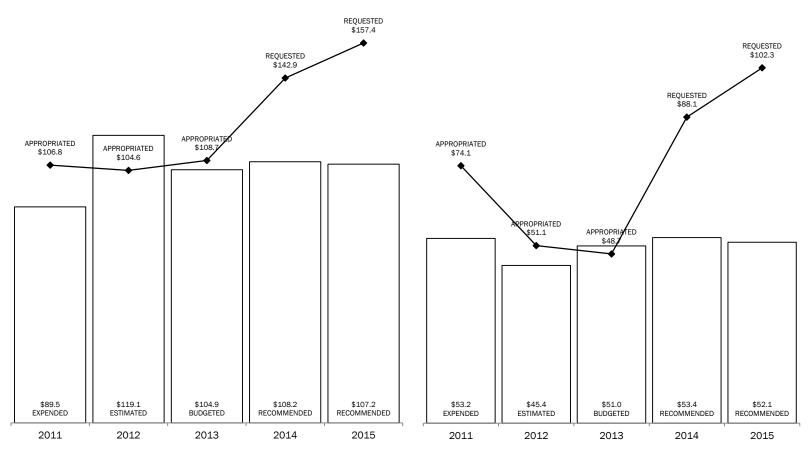
2014-2015 BIENNIUM

IN MILLIONS

TOTAL= \$215.4 MILLION

ALL FUNDS

GENERAL REVENUE AND GENERAL REVENUE-DEDICATED FUNDS



Note: All Funds fiscal year 2012 expenditures exceed appropriated amounts because the Water Development Board (WDB) has estimated appropriation authority for State Participation Bond payments. General Revenue and General Revenue-Dedicated Funds in fiscal year 2013 expenditures exceed appropriated amounts because the WDB has unexpended balance authority within a biennium for debt service payments.

Section 2

Debt Service Payments - Non-Self Supporting G.O. Water Bonds

Summary of Recommendations - House, By Method of Finance -- ALL FUNDS

Strategy/Goal	2012-13 Base	2014-15 Recommended	Biennial Change	% Change	Comments (Optional)
EDAP DEBT SERVICE A.1.1	\$47,300,368	\$50,189,878	\$2,889,510	6.1%	Recommendations include an increase of \$2.9 million in General Revenue, offset by a decrease of \$51,406 in the Economically Distressed Areas Bond Payment Account No. 357 (Other Funds) to pay existing debt service obligations.
STATE PARTICIPATION DEBT SERVICE A.1.2	\$46,364,276	\$18,969,146	(\$27,395,130)	(59.1%)	Recommendations include a decrease of \$27.4 million in the State Participation Bond Payment Account No. 8432 (Other Funds) to pay existing debt service obligations, primarily because in fiscal year 2012, one-time prepayments from the Lower Colorado River Authority (\$24.5 million) and the Upper Trinity River Authority (\$0.2 million) and related interest earnings (\$2.5 million) were not included in the baseline request for the 2014-15 biennium. The WDB has estimated appropriation authority for the Other Funds in this program.
WIF DEBT SERVICE A.1.4	\$130,303,197	\$146,265,976	\$15,962,779	12.3%	Recommendations include increases of \$6.2 million in General Revenue and of \$9.8 million in the Water Infrastructure Fund No. 302 (Other Funds) to pay existing debt service obligations.
Total, Goal A, GEN OBLIGATION BOND DEBT SERVICE	\$223,967,841	\$215,425,000	(\$8,542,841)	(3.8%)	
Grand Total, All Strategies	\$223,967,841	\$215,425,000	(\$8,542,841)	(3.8%)	

Debt Service Payments – Non-Self Supporting G.O. Water Bonds Selected Fiscal and Policy Issues

1. Fund Existing Debt Service Obligations

Recommendations include a net decrease of \$8.5 million to fund existing debt service obligations, or an increase of \$9.1 million in General Revenue, offset by a decrease of \$17.7 million in Other Funds. An increase in General Revenue appropriations in the 2014-15 biennium is a combination of 1) projected debt service needs for all prior year issuances, including new 2012-13 issuances; and, 2) debt service lapses of \$3.4 million from General Revenue in the 2012-13 biennium, which contributed to the biennial change. Lapses estimated for the 2012-13 biennium in debt service from General Revenue are related to timing of the issuance, lower final rates than the 5.5% budgeted, actual principal structure, and demand.

2. State Water Plan Expended and Appropriated Amounts from 1998-99 to the 2012-13 Biennium.

The Seventy-fifth Legislature, 1997 passed legislation which required the adoption of a State Water Plan (SWP). The SWP itself was not actually funded until the 2008-09 biennium. Bond issues authorized, actually issued, and General Revenue appropriations to pay debt service for all Water Development Board (WDB) bond programs are shown below:

General Revenue Approp	riatio	ns for	GO I	Nater E	Bond	Debt S	ervi	ce, 199	8-99	to 2012	2-13					
Funding Decisions (in Millions)	199	8-99	200	00-01	20	02-03	20	04-05	20	06-07	20	08-09	20	10-11	20	012-13
Total Debt service - All GO Water Bond Debt	\$	7.6	\$	26.5	\$	37.8	\$	41.6	\$	40.3	\$	93.3	\$	143.0	\$	99.8
State Participation	\$		\$	10.7	\$	13.1	\$	10.4	\$	6.5	\$	16.5	\$	26.0	\$	-
Economically Distressed Areas Program	\$	7.6	\$	15.8	\$	21.8	\$	25.8	\$	28.4	\$	39.2	\$	40.8	\$	44.5
Water Infrastructure Fund	\$	-	\$	-	\$	-	\$	-	\$	-	\$	32.3	\$	76.2	\$	55.3
Agricultural Water Conservation Program	\$	-	\$	-	\$	2.9	\$	5.4	\$	5.4	\$	5.4	\$	-	\$	-
Debt service - State Water Plan only	\$	-	\$	-	\$	-	\$	-	\$	-	\$	46.6	\$	72.4	\$	55.3
State Participation											\$	9.9	\$	5.8	\$	-
Economically Distressed Areas Program											\$	4.4	\$	2.1	\$	-
Water Infrastructure Fund											\$	32.3	\$	64.5	\$	55.3
State Water Plan - GO Bond Authority																
Legislative authorization	\$		\$	-	\$	-	\$	-	\$		\$	762.8	\$	707.8	\$	200.0
State Participation											\$	276.1	\$	200.0	\$	-
Economically Distressed Areas Program											\$	37.5	\$	34.4	\$	-
Water Infrastructure Fund											\$	449.3	\$	473.4	\$	200.0

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General Revenue Appropriations for GO Water Bond Debt	Service, 1	998	8-99 t	to 201	2-13,	continu	ıed					
Amounts Actually Issued	\$ -		\$	-	\$	-	\$	\$	-	\$ 438.2	\$ 494.1	\$ 100.0
State Participation										\$ -	\$ 45.6	\$ -
Economically Distressed Areas Program										\$ -	\$ 34.2	\$ -
Water Infrastructure Fund										\$ 438.2	\$ 414.3	\$ 100.0

Notes:

- 1)Totals may not add due to rounding
- 2) General Revenue appropriations for debt service do not reflect reductions made by HB 4586, Eighty-first Legislature; HB 4, Eighty-second Legislature.
- 3) 2012-13 debt service figures for State Water Plan do not include debt service for SWP projects financed through the EDAP program.

Sources: Legislative Budget Board, Water Development Board

Although \$200 million in new bond issuances were authorized in the 2012-13 biennium, the WDB was provided debt service appropriations to fund only \$100 million in new issuances, subject to fluctuating market conditions. The WDB has implemented the full \$100 million in funded issuances.

Also, in the 2008-09 and 2010-11 biennia, \$276.1 million and \$200 million in bond authority for the State Participation Program (SPP) was granted, respectively. Amounts actually issued in 2008-09 and 2010-11 were \$0 and \$45.6 million, respectively. Instead, the overwhelming demand has been for the Water Infrastructure Fund (WIF). Accordingly, the Eighty-second Legislature prioritized 2012-13 issuances for the WIF program. In general, funding for WIF is designed to help a political subdivision address existing water infrastructure needs, such as construction of a new water plant to supply an existing customer base. The SPP is designed to address future water supply needs, on a longer term basis. Examples of SPP projects would be construction of a new reservoir, laying 40-inch pipelines in lieu of 10-inch pipelines, or other construction to expand capacity in anticipation of future demand based on population growth.

Note that under Rider 4 authority, the LBB may approve a WDB request to transfer bond authority between WIF and the SPP to address program demands. Although this authority is in the agency's bill pattern, it has never been used.

3. A Comparison of Funding Models for the State Water Plan

In December 2011, the WDB adopted the 2012 State Water Plan (SWP). The SWP is developed through a regional planning process, and costs are self-reported by 16 regional water planning groups. Each group contains members that represent agriculture, industry, public, environment, municipalities, business, water districts, river authorities, water utilities, counties, and power generation. The total capital cost of the plan through 2060 is estimated to be \$231 billion, including: 1) Water treatment and distribution (\$88.9 billion); 2) wastewater treatment and collection (\$81.7 billion); 3) implementation of water management strategies (\$53.1 billion); and 4) flood control efforts (\$7.5 billion).

The regional planning groups anticipate needing up to \$26.9 billion in state assistance to implement the \$53 billion in estimated

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needs for water management strategies. Water management strategies include conservation, reuse, and desalinization. At this time, there is no estimate of how much additional state assistance may be needed for other plan components: water treatment and distribution, wastewater treatment and collection, and flood control efforts.

The WDB has developed two proposed models for financing the SWP: Traditional Debt Service versus a Revolving Fund Model. In the example shown below, the state would provide a cash infusion of \$550.0 million in the 2014-15 biennium, and \$150.0 million each fiscal year thereafter for 14 years (\$2.1 billion) to serve as the corpus of a revolving fund. A comparison of the models shows that the revolving fund provides \$17.3 billion more in funds for SWP projects over a 50 year period than a traditional debt service model (\$44.2 billion - \$26.9 billion = \$17.3 billion). In this same example, a revolving fund would also cost the state \$6 billion less than a traditional debt service approach for the same period (\$8.6 billion - \$2.6 billion):

Methods of Financing th	ne St	ate Wate	r Pla	an
	Tra	ditional ¹	Re	volving ²
		(In Bil	lions)	
Project financing through 2060	\$	26.90	\$	44.20
Debt to be incurred by state (P&I)	\$	66.50	\$	-
Repayments from borrowers (P&I) - with interest subsidies and deferrals Overall cost to the state through	\$	59.20	\$	-
2060	\$	8.60	\$	2.60
Cost in 2014-15 Biennium	\$	1.80	\$	0.55

Note:

- 1) Continued reliance on General Revenue to provide debt service on general obligation (GO) bonds, which affects the Constitutional Debt Limit (CDL).
- 2) Use of loans, self-supporting GO or revenue bonds, or not self-supporting GO bonds financed with a dedicated revenue source would not affect the CDL.

The WDB arrived at its project financing estimate based on results of an Infrastructure Financing Survey Result (IFR) of 694 entities. (See attachment). The analysis includes categories of capital costs requested, as well as the appropriate agency program for each: Water Infrastructure Fund (WIF) –construction, rural, and deferred, and State Participation –and the related General Revenue requirement for debt service.

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Traditional Model Assumptions

The WDB provided a debt service schedule for financing the \$26.9 billion (see attachment). Note that debt service in the first biennium of \$1.8 billion is relatively high, compared to subsequent years. This is primarily related to \$15.7 billion being needed in the period of fiscal year 2010-2019, primarily to address a backlog of previously identified, but unfunded projects.

Revolving Fund Dynamics

In the Revolving Fund model, the entire corpus of the fund, or \$550.0 million in this example, would be lent to borrowers for SWP projects. Principal of loan repayments could be immediately re-let, with interest earnings being available for either relending or for interest rate subsidies on future loans, or payment of debt service on self-supporting general obligation or revenue bonds. The WDB already manages several revolving funds, most notably the Clean Water State Revolving Fund and the Drinking Water State Revolving Fund, both of which are outside the appropriations process.

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Modeling Assumptions of \$26.857B

that they would be unable to support financing for 58.1% of the projects costs or \$26.857B the municipalities with a total financing need of \$46.2B. Of the \$46.2B, the responding entities noted Attachment 1). A portion of those capital costs were projected to be financed by private entities leaving Of the 694 entities surveyed in the IFR, 269 responded indicating total capital costs of \$53.1B (see

purposes and assumed as a zero percent loan / full interest subsidy. WIF Construction was modeled at a during repayment. State Participation was modeled with standard program terms. 1% subsidy. WIF Deferred was modeled with a ten year principal and interest deferral and a 1% subsidy TWDB programs, as outlined in TABLE 1. WIF Rural and Disadvantaged were combined for modeling The \$26.857B was further defined by types of capital costs requested which correspond to specific

TABLE 1

Capital Costs Requested	%	Dollar Value	Program
Acquisition and construction	74.60%	74.60% \$20,030,989,824 WIF Construction	WIF Construction
Disadvantaged	1.50%	1.50% \$400,464,473	WIF Rural
			State
Excess capacity	11.50%	11.50% \$3,080,529,356	Participation
Planning, design, permitting	12.30%	12.30% \$3,304,718,069	WIF Deferred
Rural	0.20%	\$40,369,058	WIF Rural

TOTAL

\$26,857,070,780

Based on the above, program funding needs are identified in TABLE 2. For modeling purposes, TWDB applied these percentages to the funding required in each decade identified in TABLE 3.

TABLE 2

TOTAL	WIF Deferred	State Participation	WIF Rural	WIF Construction	Program
100%	12%	11%	2%	75%	% of Funding

TABLE 3

	Funding Needed
2010-2019	\$15,661
2020-2029	\$4,190
2030-2039	\$4,085
2040-2049	\$1,934
2050	\$623
2060	\$364
	\$26,857

(See ATTACHMENT 2 - MODELING ASSUMPTIONS). par value issued was sized up to allow for cost of issuance and funding the full required dollar value of An inflation factor of 3.80% was added to the financing needs based on decade of debt issuance and the projects needed. TWDB debt issuance assumptions of 5.50% and cost of issuance of 2.5% were used

Summary of Results

would be required to meet debt service needs. programs based on the assumptions. For the 2014-2015 Biennium, a total of \$1.83B general revenue TABLE 4 outlines general revenue requirements for debt service by program and in summary for all

ESTIMATED GENERAL REVENUE REQUIREMENTS \$26.857 Billion by Decade

8,602,342,880	8,602,342,880	844,007,979	2,253,804,781	514,357,273	4,990,172,846	Ī
0,						2070
3 718 100	1,856,275			1,856,275		2069
3,721,350	1,859,450			1,859,450	,	2067
	1,861,900			1,861,900		2066
3,714,900	1,858,900		1	1,858,900		2065
	1,856,000			1,856,000	•	2064
3,334,225	1,859,025			1,859,025		2063
	1,475,200			1,475,200		2062
1					•	2061
00,049,329	+4,+40,00			4,770,900	37,000,101	2080
60 640 630	26,2U4,326			4,770,175	21,434,353	2050
9,548,375	4,773,975	1	ı	4,773,975		2057
	4,774,400			4,774,400		2056
9,547,350	4,772,550			4,772,550		2055
	4,774,800	•		4,774,800		2054
2,612,602	2,612,602	1	1	2,612,602	•	2053
						2052
ı		1			•	2051
						2050
164,965,394	82,487,197			7,961,700	74,525,497	2049
	82,478,197	•	ı	7,955,300	74,522,897	2048
22,980,520	15,020,395	1		7,957,375	7,063,020	2047
	7,960,125			7,960,125		2046
15,915,275	7,955,200			7,955,200		2045
	7,960,075	•		7,960,075		2044
15,922,225	7,961,400			7,961,400		2043
	7,960,825			7,960,825		2042
13.972.583	7,960,000			7.960.000	•	2041
	6.012.583			6.012.583		2040
18 139 000	9,063,675			9,063,675		2039
0,100,010	9,075,325			9,075,335		2028
18 150 375	9,070,373			9,075,575		2027
743,300	743,300 0 076 575		1	743,300	•	2035
1	742 200			1		2034
447,404,036	223,709,756	•		21,582,225	202,127,531	2033
	223,694,281			21,577,050	202,117,231	2032
854,451,706	243,477,479	ı		21,573,250	221,904,229	2031
	610,974,226	1	1	27,950,294	583,023,933	2030
342,839,499	171,417,337		1	16,533,300	154,884,037	2029
	171,422,162			16,532,575	154,889,587	2028
342,844,949	171,420,387			16,535,125	154,885,262	2027
000,012,000	171 424 562			16,534,800	154 889 762	2026
580 512 9 99	171 416 687	• •	207,070,000	16.530.175	154,886,512	2005
923,200,454	449,391,779	40,490,392	237,673,625	16,535,425	154,666,337	2023
000 060 454	4/3,6/6,6/5	64,583,688	237,673,825	16,532,625	154,886,537	2022
1,317,209,702	506,344,606	81,429,671	237,674,625	16,531,000	170,709,310	2021
	810,865,095	95,367,025	234,500,308	21,627,727	459,370,035	2020
779,195,031	383,985,201	74,602,759	179,745,175	12,503,500	117,133,766	2019
	395,209,831	85,833,415	179,742,500	12,503,100	117,130,816	2018
812,881,747	395,208,481	85,833,415	179,740,925	12,501,125	117,133,016	2017
	417,673,266	108,294,725	179,742,000	12,504,775	117,131,766	2016
1,826,099,654	466,753,338	108,294,725	179,741,450	12,500,425	166,216,738	2015
	1,359,346,317	99,270,165	169,899,748	28,314,167	1,061,862,238	2014
Estimated Biennial Draw	Estimated Total Draw	State Participation	WIF Deferred	WIF Rural	WIF Construction	

Source: Water Development Board, 8/21/2012

Section 4 Debt Service Payments - Non-self Supporting G.O. Water Bonds Performance Review and Policy Report Highlights

Reports & Recommendations	Report Page	Savings/ (Cost)	Gain/ (Loss)	Fund Type	Included in Introduced Bill	Action Required During Session
Fund the State Water Plan to Ensure Adequate Future Water Supplies	305					
1. Amend statute to create a dedicated revenue source for the State Water Plan and include a contingency rider in the 2014-15 General Appropriations Bill to appropriate revenue estimated to be collected from the option selected to the Texas Water Development Board to fund State Water Plan projects.		TBD		Other		Amend Statute Adopt Contingency Rider

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Debt Service Payments – Non-Self Supporting G.O. Bonds Rider Highlights

- 1. **Payment of Debt Service: Economically Distressed Areas Bonds**. Rider modified to delete references to the additional \$100 million in Economically Distressed Area bonds authorized during the 2012-13 biennium. The debt service related to this issuance is included in the strategy recommendations.
- 3. **Payment of Debt Service: Water Infrastructure Bonds**. Rider modified to delete references to the additional \$200 million in Water Infrastructure Fund bonds authorized during the 2012-13 biennium. The debt service related to this issuance is included in the strategy recommendations.

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Debt Service Payments - Non-Self Supporting G.O. Water Bonds Items not Included in Recommendations - House

	2014-15 Bio	ennia	l Total
In Agency Priority Order	GR & GR- Dedicated		All Funds
1. State Water Plan Debt Service: Debt service funding for \$700 million in bonds for the Water Infrastructure Fund and \$200 million in bonds for the State Participation Program for continued implementation of State Water Plan financing.*	\$ 78,852,175	\$	78,852,175
 Economically Distressed Areas Debt Service. Debt service funding for \$50 million in General Obligation bonds for EDAP projects. 	\$ 6,041,509	\$	6,041,509
Total, Items Not Included in the Recommendations	\$ 84,893,684	\$	84,893,684

^{*}If the Eighty-third Legislature enacts legislation that creates a Capitalization Funding Model to finance the State Water Plan (SWP), the agency would not need this \$78.9 million exceptional item from General Revenue for debt service on \$900 million in new SWP issuances.