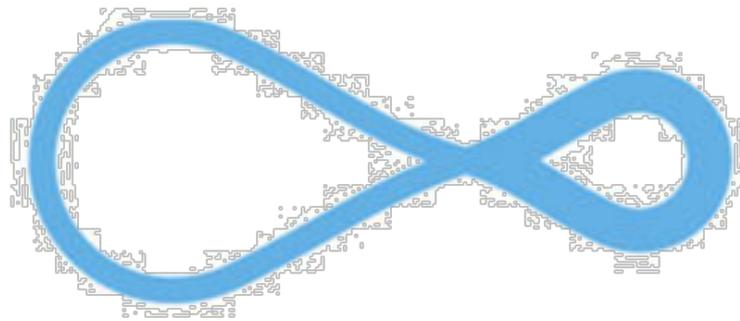


Guaranteed Water Bonds

Flowing Ideas, Enriching Lives



water.org™

Team #30 (McGill University)

Current Challenges



- “WaterCredit” system is successful but lacks sufficient capital
- Current framework is suitable for small revenue stream projects on a household basis
- New financing regime required for Water.org’s goal of serving 100M in 5yrs



Opportunity Statement



Guaranteed Water Bonds (GWBs) will fund water development projects globally thereby providing over **100M people with a safe and sustainable water supply within **5 years** by raising **\$4B** in institutional investment.**



- Development of financing mechanism called **“Guaranteed Water Bonds”**
- GWBs will allow:
 - Capture of institutional capital
 - Coupling with corporate project management
 - Promotion of local ownership of water assets
- Decreasing reliance on philanthropic organizations
 - Allowing for focus on core competencies

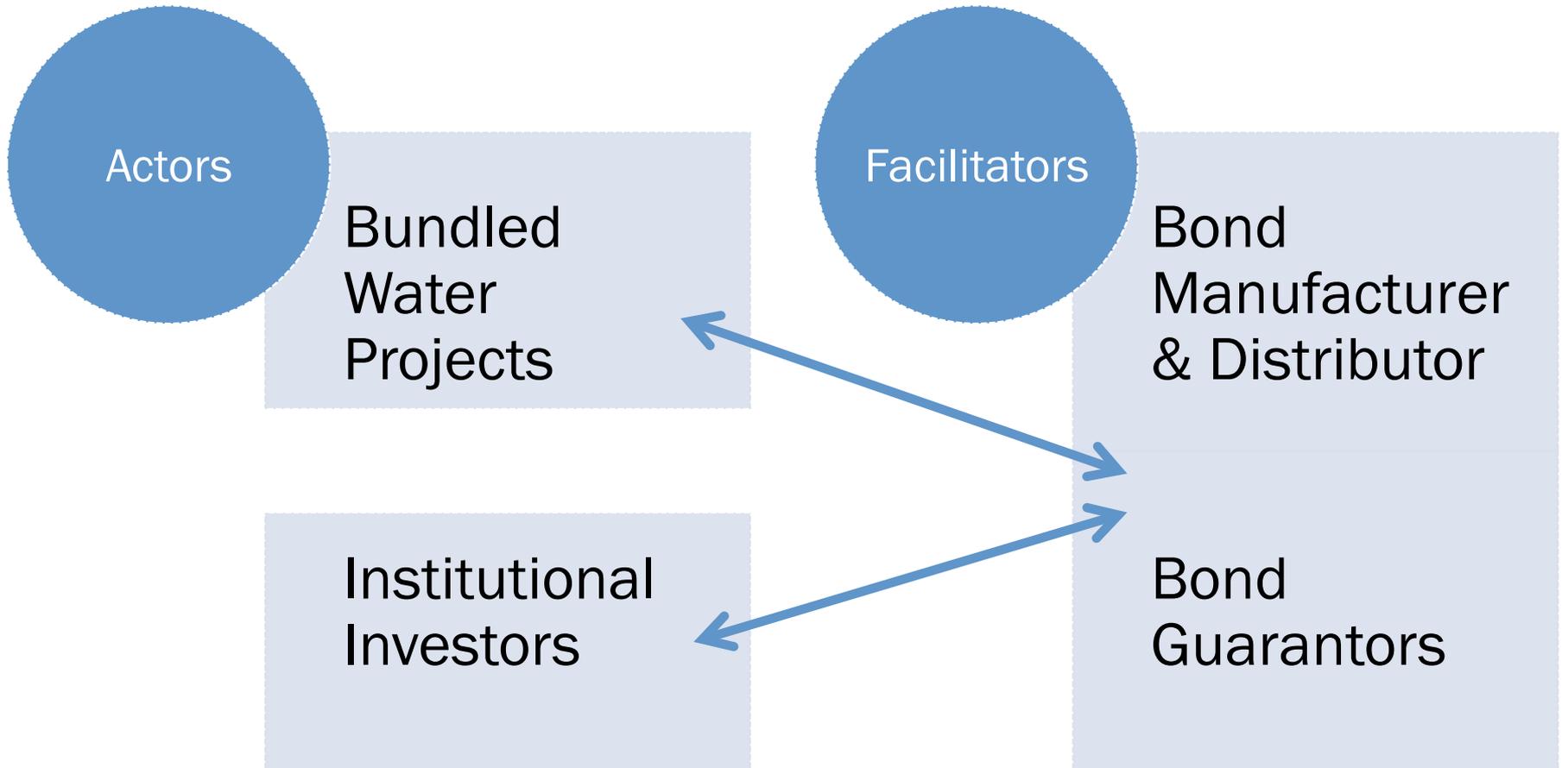
Guaranteed Water Bonds



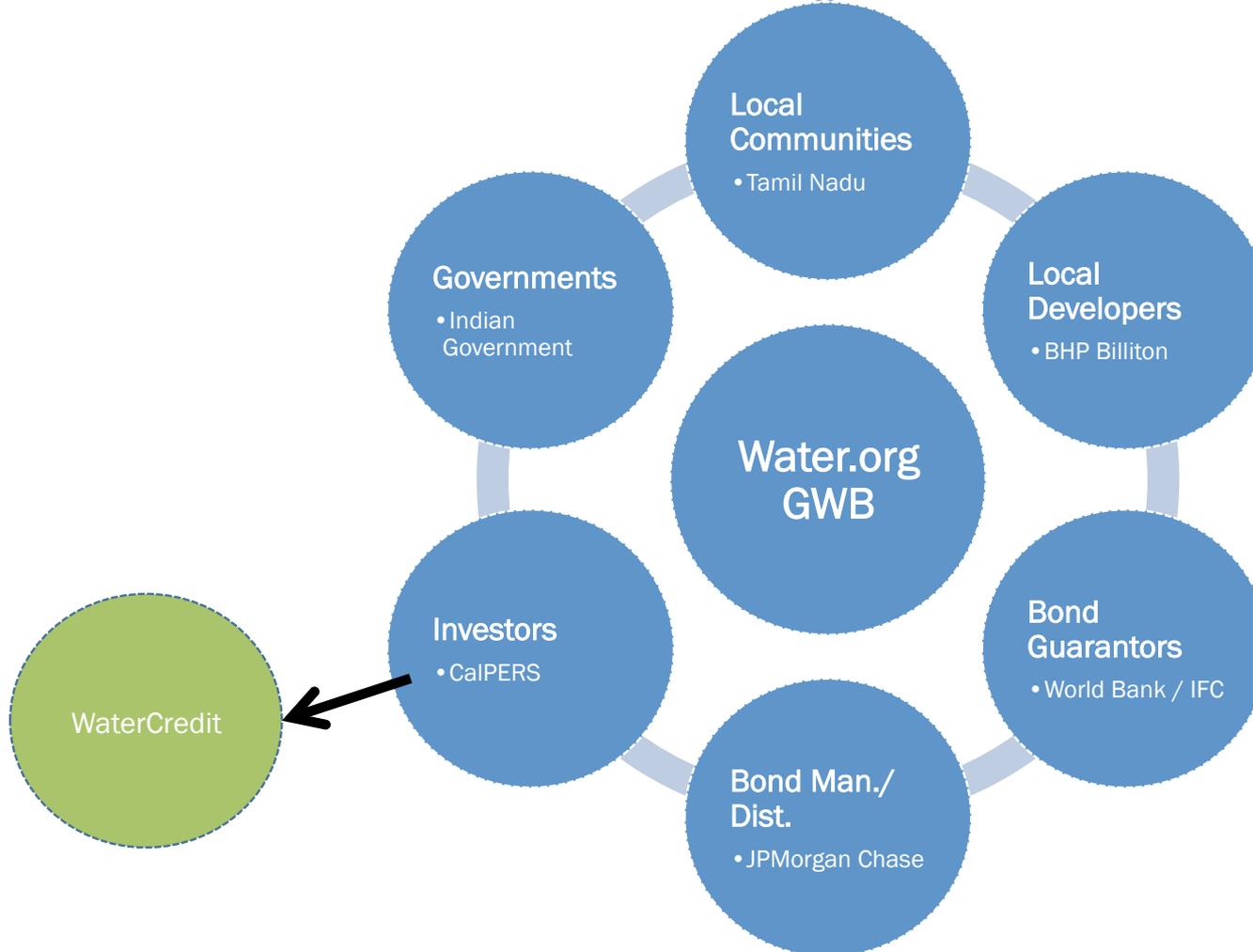
Alternative Guaranteed Fixed Income Investment

- Guaranteed Asset Backed Security (30 years)
 - 100% principal protection uncorrelated to market conditions
 - Opportunity to invest in a broad range of water projects
 - High grade fixed income product
 - Annualized yield higher than treasury bonds
 - Initial securities with return of t+8% (India/ A BHB Billiton)
 - Excess returns can be funneled to WaterCredit
- Water development initiatives bundled as fund assets
- Sold to large investors – pension funds
- Bond default guaranteed by corporations with local interests
- Corporate default guaranteed by World Bank / IFC

Principal GWB Players



Stakeholders



Implementation



TOMORROW

- Establish relationship between Water.org and Bond Manu./Dist. (\$500k)
- Current target is JPMorganChase

2-6 WEEKS

- Creating of Guaranteed Water Bonds Structure
- Leverage Water.org and WaterCredit contacts to find potential local developers – India (\$500k)
- Establish relationship with bond guarantors

> 6 MONTHS

- Shovel in the ground (fund will be in the hands of the local developers)
- Broadening scope of investors and guarantors



Questions?



Guaranteed Water Bonds (GWBs) will fund water development projects globally thereby providing **100M people** with a safe and sustainable water supply **within 5 years** by raising \$4B in institutional financing



Opportunities

1. Alternative
2. Decision matrix

GWB Features

1. Registered
2. High credit rating
3. Bond returns
4. Country specific bond return matrix
5. Prepayable ABS
6. Payment risk

Stakeholder Benefits

1. Local community
2. Local developers
3. Local government
4. Bond guarantors
5. Corporate default guarantors
6. Bond manu./dist.
7. Investors
8. Water.org

Primary GWB Player Profiles

1. Bundled assets
2. Institutional investors
3. GWB guarantors
4. GWB manu./dist.

Primary GWB Benchmarks

1. GWB guarantors/locations
2. Institutional investments



- Why do we require Guaranteed Water Bond Guarantors to have a High Credit Rating of (A – S&P // A2 – Moody’s // A – Fitch)?
 - A high credit rating (as described) is a baseline requirement for our set of target investors. The credit rating of the GWB will be largely determined by the credit rating of the underlying guarantor
 - A high credit rating will also reduce the likelihood of “bust” scenarios which would lead to bad press for water.org and the participant stakeholders



- What return do investors achieve investing in Guaranteed Water Bonds? How is this determined?
 - Investors in GWBs achieve returns that are linked to the political and economic stability of the underlying asset investment locations, along with the economic viability of the underlying bond guarantor. The initial Typical returns on corporate bond issues made by A (S&P) are normally in the range of government treasuries plus 2~5%. Country specific risk is evaluated by the Euromoney's Country Risk Ratings which looks at the following factors:
 - ✦ Political Risk
 - ✦ Economic Performance/Projections
 - ✦ Structural Assessment
 - ✦ Debt Indicators
 - ✦ Credit Rating
 - ✦ Access to Bank Finance
 - ✦ Access to Capital Markets

GWB FEATURES – Bond Return Matrix



Location of GWB Assets	Bond Return (30 year US Treasury +)
India	5% (4% to 8%)
Bangladesh	10% (7% to 14%)
Pakistan	8% (6% to 12%)
Tanzania	11% (8% to 15%)
Nigeria	12% (9% to 16%)
Uganda	11% (8% to 15%)
Kenya	11% (8% to 15%)
Sudan	13% (10% to 17%)
Bolivia	9% (7% to 13%)
WaterCredit	Return
Range of:	10% ~ 24%

Stakeholder Benefits

Local Community



- Improved quality of life
- Community Pride
 - Culture of successful entrepreneurship
- Spinoff businesses
 - Agriculture/Irrigation
 - ✦ Success Story: S. Gandhamani captures wastewater from tap to create thriving banana garden for extra income
 - ✦ Gandhamani has added the equivalent of five weeks of wages to her yearly income
 - Construction

Stakeholder Benefits

Local Developers/Owners



- Access to capital
- Development of local project management skills
 - Through mentorship and business acumen transfer from guarantors development of management training facilities
- Possible to capture economies of scale of water development projects
 - Realizing savings on other projects

Stakeholder Benefits

Bond Guarantors



- Healthy Population
- Lower Absenteeism
- High Productivity
- CSR benefits
- Reduced project risk through development of local management facility



Stakeholder Benefits

Corporate Default Guarantors



- In line with mission



Stakeholder Benefits

Bond Manufacturers/Distributors



- Revenue
- CSR benefits



Stakeholder Benefits

Investors



- Steady Revenue Stream
- Safety of Principal



Stakeholder Benefits Local Governments



- Increased GDP
- Ensures long term corporate investment



Stakeholder Benefits

Water.org



- Greater concentration on key competency
 - Piggy back on infrastructure GWB will be provide



GWB FEATURES – Qualified Bearer Bond



- Why is the Guaranteed Water Bond a Limited Bearer Bond?
 - Guaranteed Water Bonds would be classified as qualified bearer bonds, allowing for water.org to administer some degree of control over who can purchase these financial products. GWB buyers would desire some degree of liquidity in the asset, and would demand the ability to sell these products if required. By having a list of qualifying investors the GWB would have some liquidity to the investor.

GWB Player Benchmarks



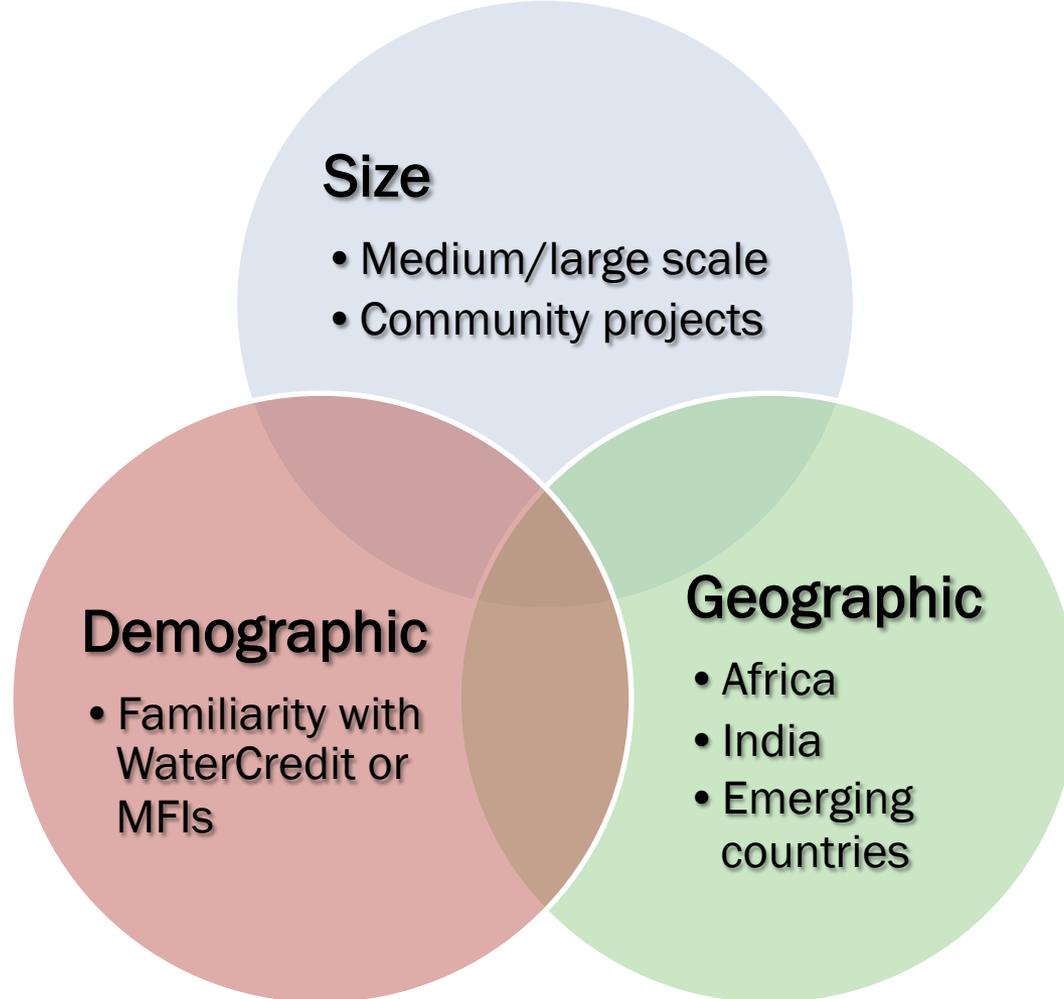
Market	Investor	Man. / Distr.
U.S.A.	CalPERS	JPMorgan Chase
U.S.A.	Harvard Endowment	HSBC
Canada	PSP Investments	TD Canada Trust
Europe	The Government Pension Fund of Norway (Global)	Credit Suisse
U.A.E.	The Abu Dhabi Investment Authority	Goldman Sachs

GWB Player Benchmarks

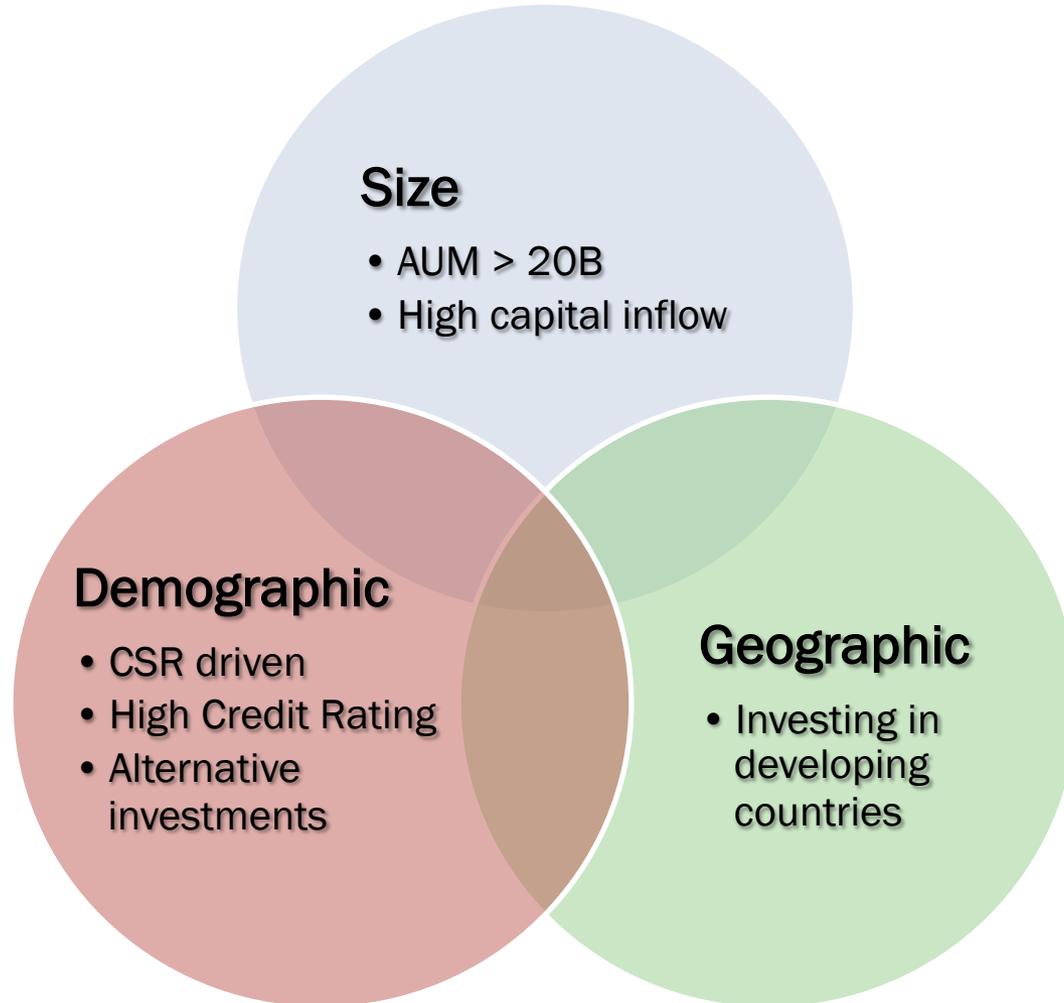


Developing Country	Bond Guarantor
India	BHP Billiton, Unilever
Bangladesh	BHP Billiton, Unilever
Pakistan	Unilever
Tanzania	Barrick
Nigeria	ExxonMobil
Uganda	
Kenya	
Sudan	
Bolivia	

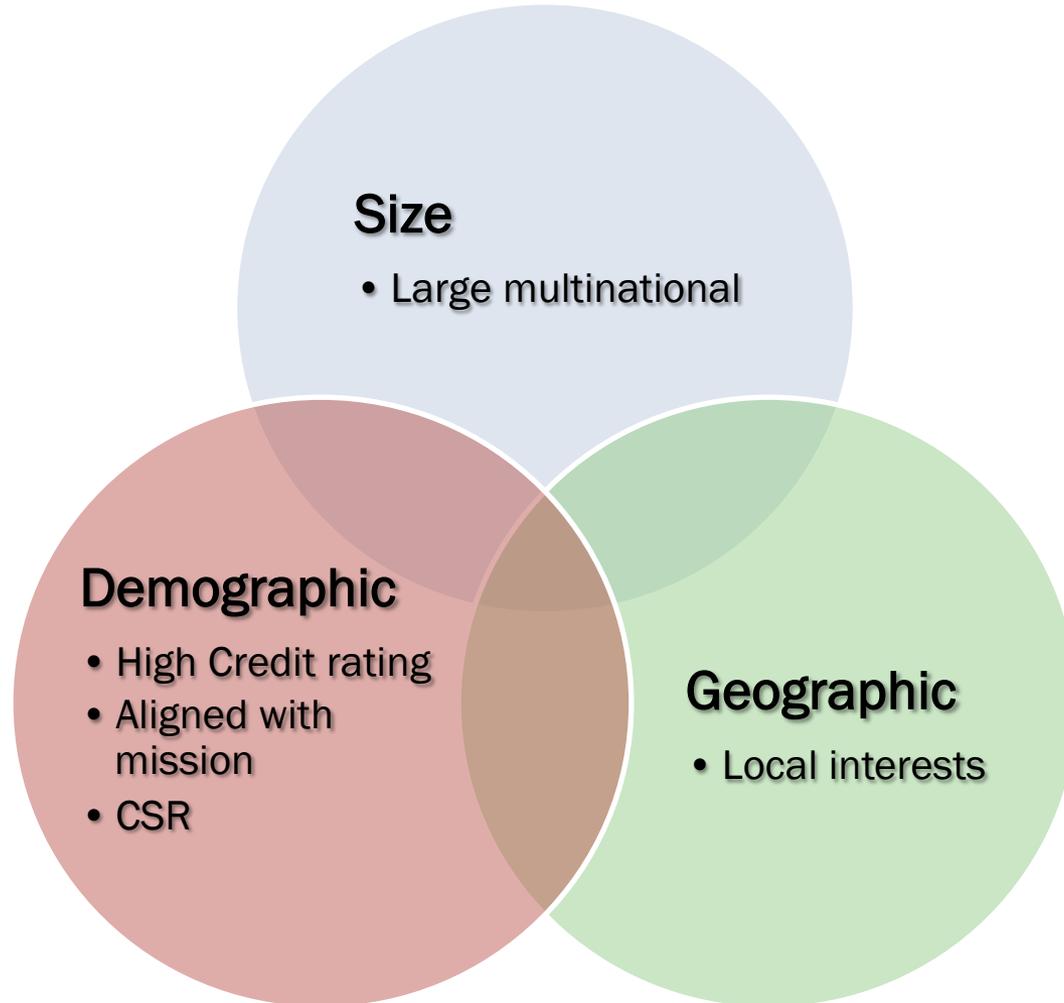
GWB Players – Bundled Assets



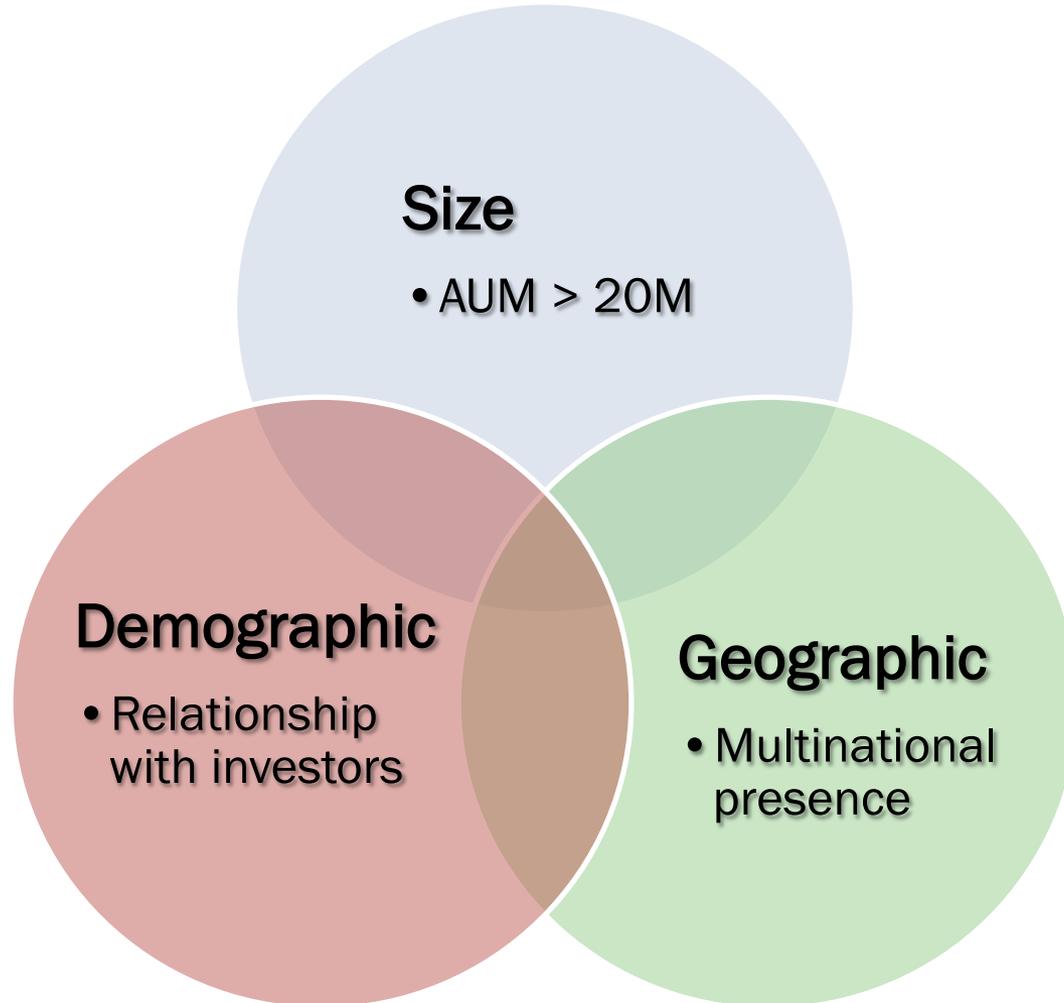
GWB Players – Institutional Investor



GWB Players – Guarantor



GWB Players – Man./Dist.



Need for Water.org



- Why can't bond manufacturers & distributors create water bonds themselves?
 - Water.org has experience facilitating

Why CalPERS ?



1. Large capital inflow, ahead of outflows
2. 5.1 % of portfolio in emerging markets,
 1. CalPERS is committed to growing its exposure
 2. Alternative investment portfolios in emerging markets
3. Strategic objectives and prescribed responsibilities
 1. Long-term investments, uncorrelated to the market
 2. “Principle One: Political Stability – Progress toward the development of basic democratic institutions and principles”

ALTERNATIVES



- Retail Investor Products
 - Marketable securities sold to retail investors with a similar structure to Asset-Backed Securities.
- Corporate Ownership
 - Direct foreign investment in water development projects by omnipresent multinational corporations



DECISION MATRIX

	Provides Sufficient Capital to achieve Water.org goals	Creates accountability for water development projects	Provides a Stable Income Stream to Investors	Principal of Investment is Guaranteed
Retail Investor Products	++	+++	++	++++
Guaranteed Water Bonds	++++	+++	++	++++
Corporate Ownership	+	-	++++	---

	Investor/Project Timeframe is Matched	Develop Positive Relationship with Local Community	PRIDE of Local Ownership	Complimentary to Water.org's current initiatives	Leverages Water.org's core Competencies
Retail Investor Products	--	+++	+++	+++	++
Guaranteed Water Bonds	++++	+++	+++	+++	+++
Corporate Ownership	Not necessarily	+	---	---	---

*A positive (+) mark denotes a characteristic that would suggest this product could lead to Water.org's goal of providing clean water to 100M people within 5 years. Multiple +'s represent increasing importance. A negative (-) mark denotes the opposite.