



Ministerio
del Ambiente

Sistema de Contabilidad Ambiental Nacional (SCAN)

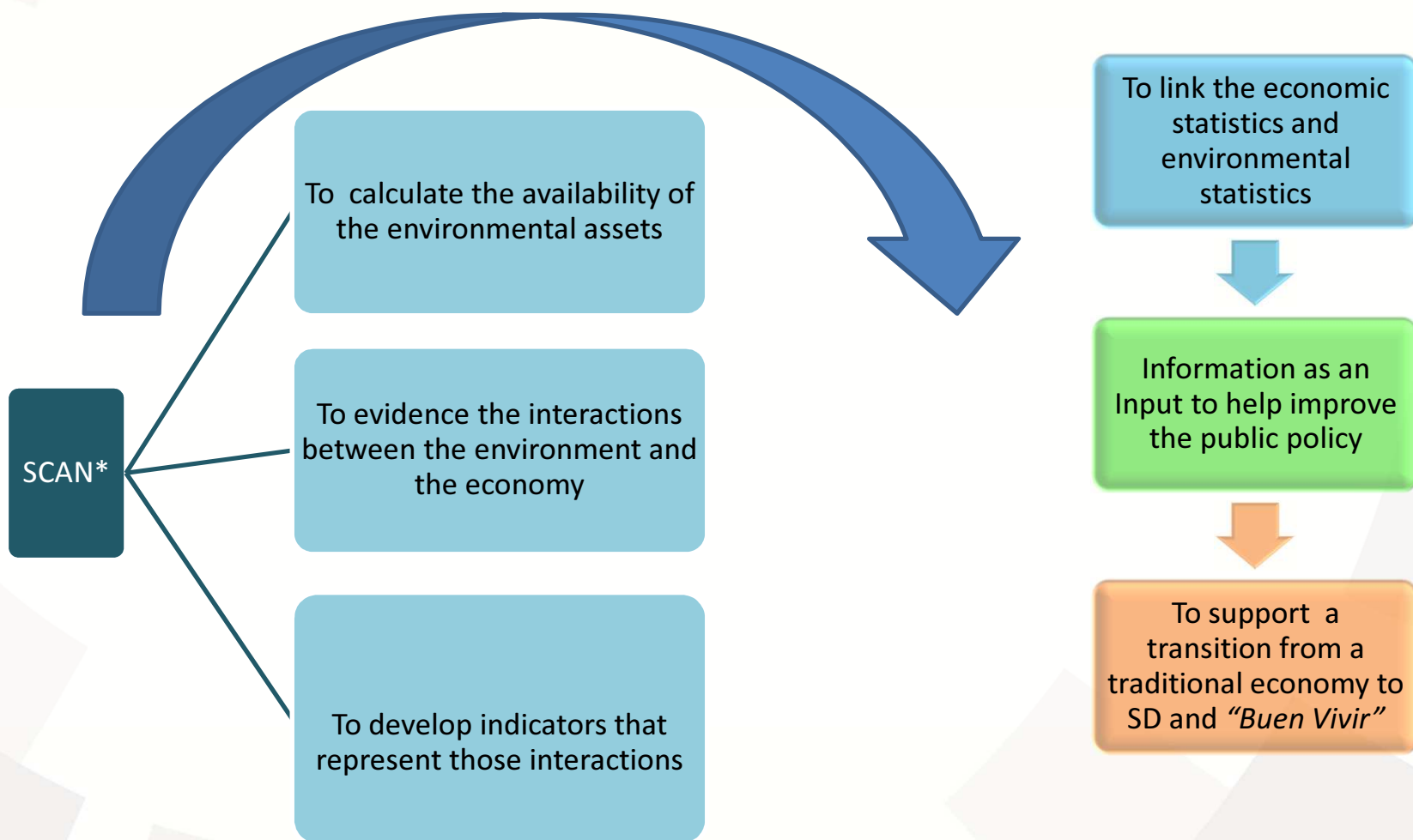
Preliminary approach to the
methodology of Ecuador's water
account, and



**Ministry of Environment,
Ecuador**

July - 2014

The objectives of SCAN



* Se basa en la metodología SEEA propuesta por Naciones Unidas, dentro del esquema de Desarrollo Sostenible y Economía Verde

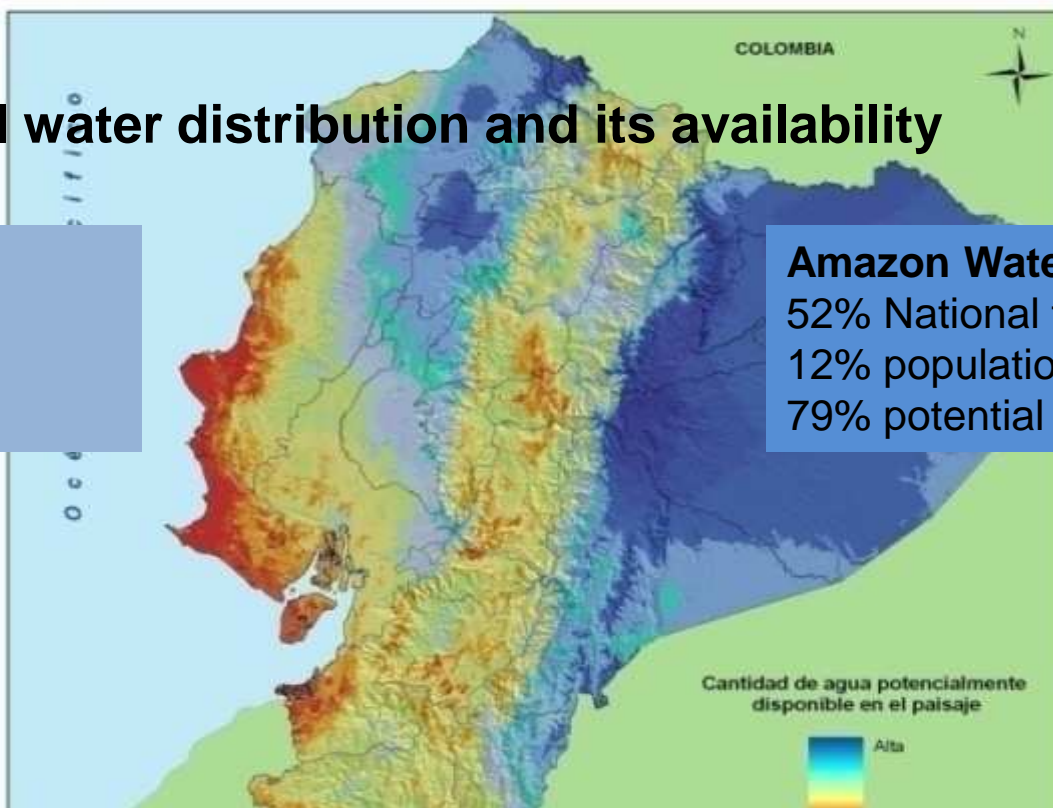
**Los activos ambientales constituyen el entorno biofísico que proporciona beneficios a la humanidad

The Water Resources in Ecuador

Potential water distribution and its availability

Pacific watershed

48% National territory
88% population
21% potential water



Amazon Watershed

52% National territory
12% population
79% potential water

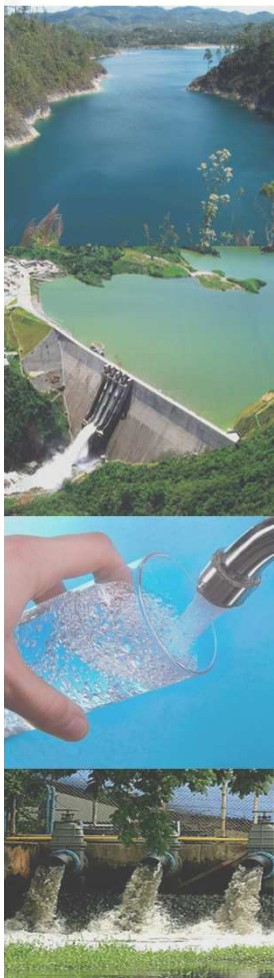
For the distribution of the population, water demand is inversely proportional to its availability

The Andean population greatly benefits from the Andean wetland ecosystems as a water reservoir (páramo)



Objectives of the methodology of Ecuador's water account

SCAN started in 2013



To identify the pressures exerted by the economy in the water resources. Show the availability of water assets in Ecuador

2014-2017

To establish strategies and commitments with other institutions to develop the water account

To recognize the limitations of the data

To identify the available information to develop the different accounts



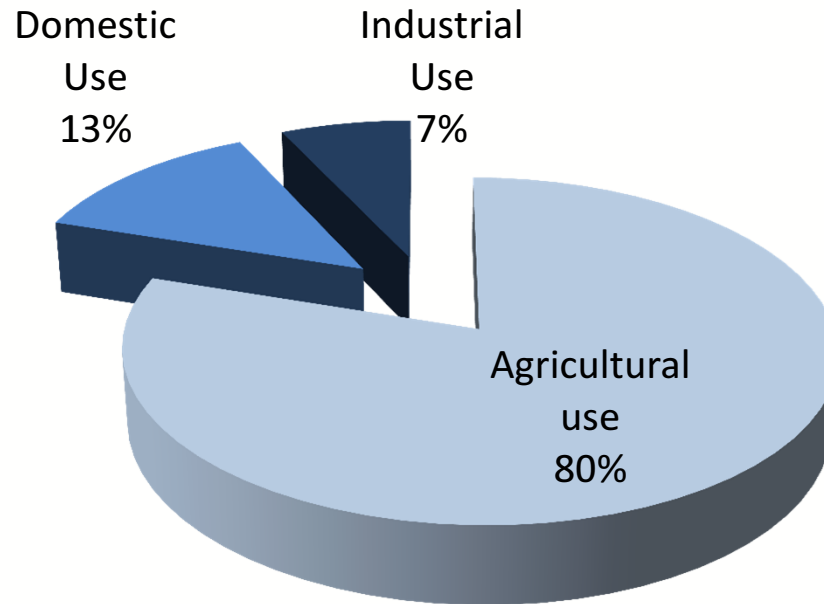
Secretaría Nacional de **Planificación y Desarrollo**



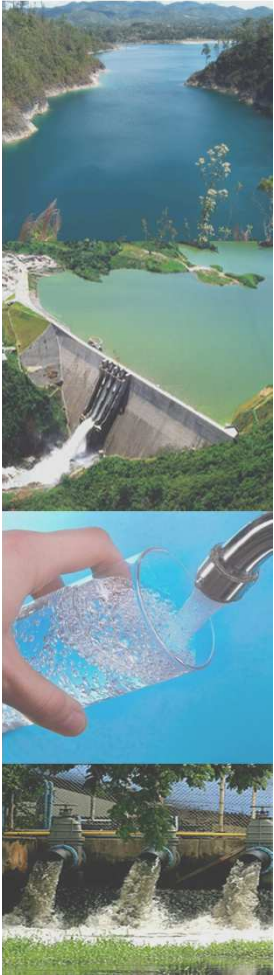
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The Water Resources and its input in Ecuador's economy

Distribution of consumptive uses of water in Ecuador, 2011



If the non consumptive use is considered, the hydroelectric energy represents the 53% of the total use



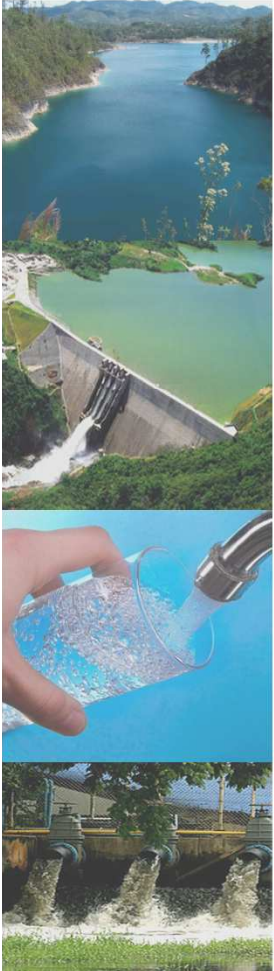
Fuente: Base de Datos de Concesiones. SENAGUA (2011)

Elaboración: Equipo Técnico y consultor Proyecto Sistema de Contabilidad Ambiental Nacional (SCAN) del Ministerio del Ambiente (MAE).

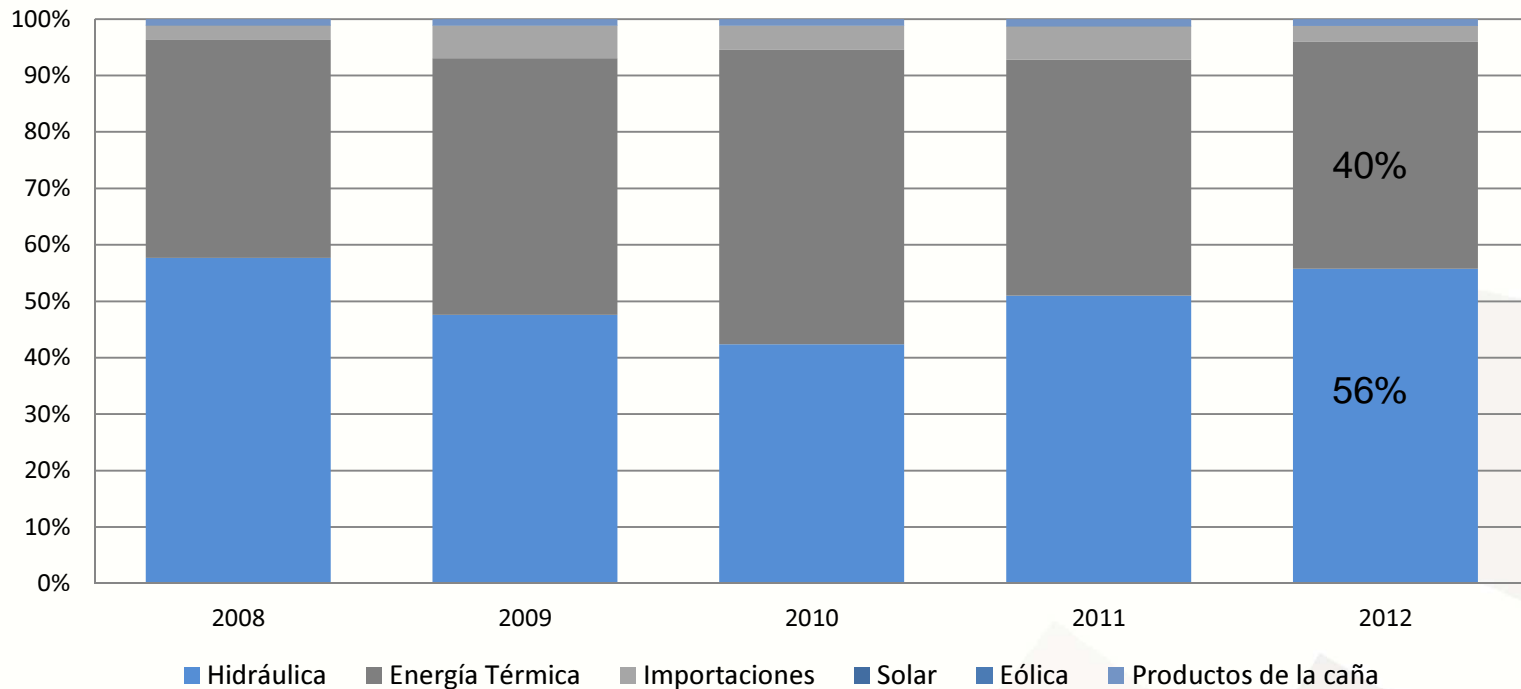


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The Water Resources and its input in Ecuador's economy



Water's contribution to the electrical matrix



Fuente: Ministerio de Electricidad y Energía Renovable

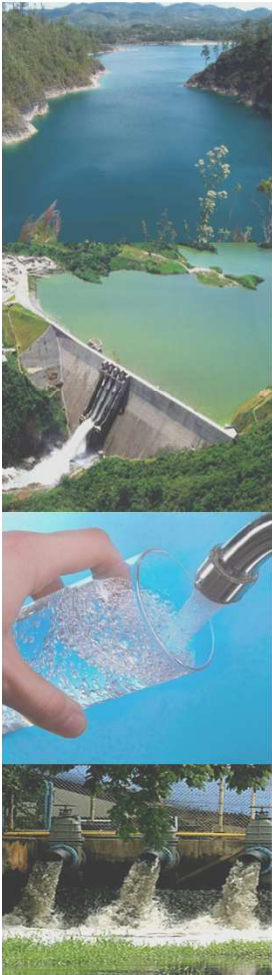
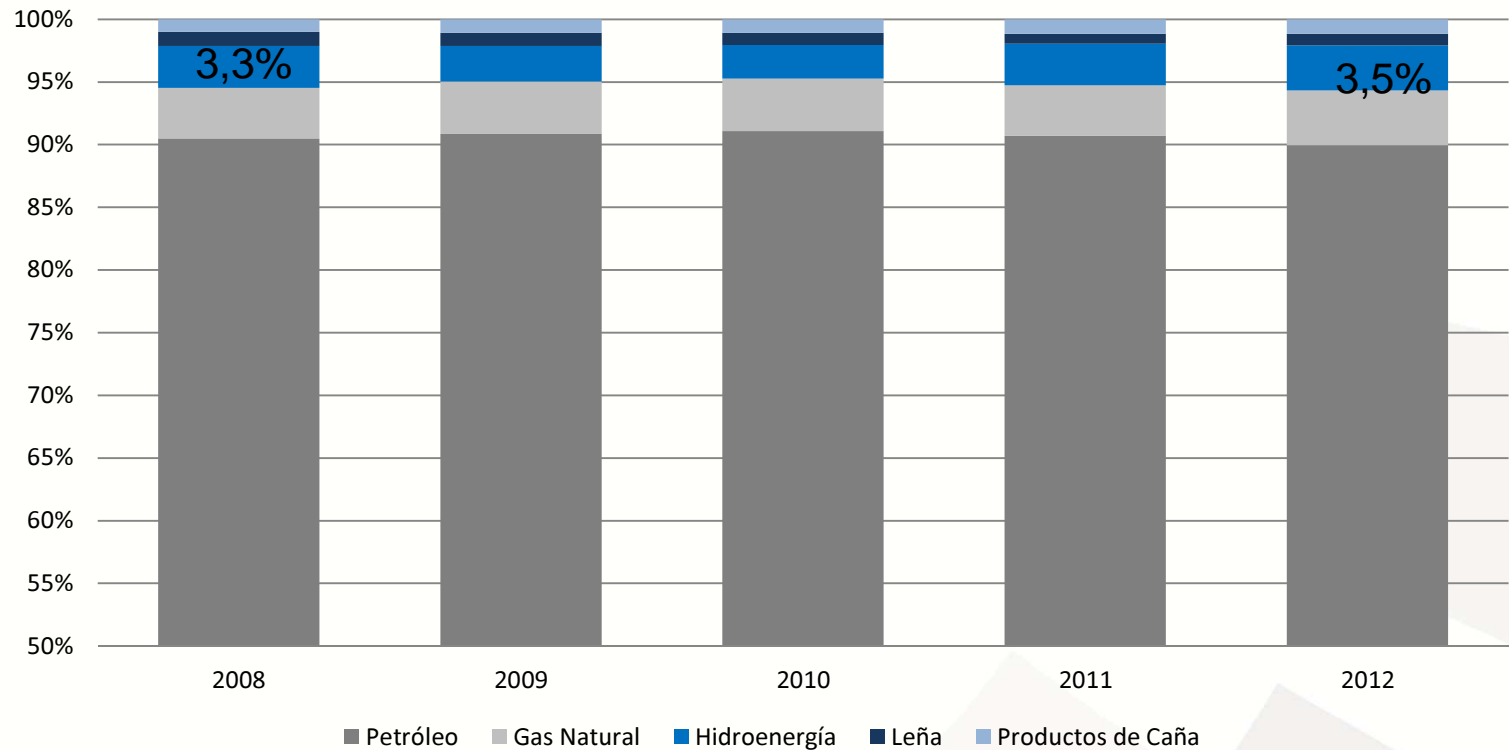
Elaboración: Equipo Técnico y consultor Proyecto Sistema de Contabilidad Ambiental Nacional (SCAN) del Ministerio del Ambiente (MAE).



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The Water Resources and its input in Ecuador's economy

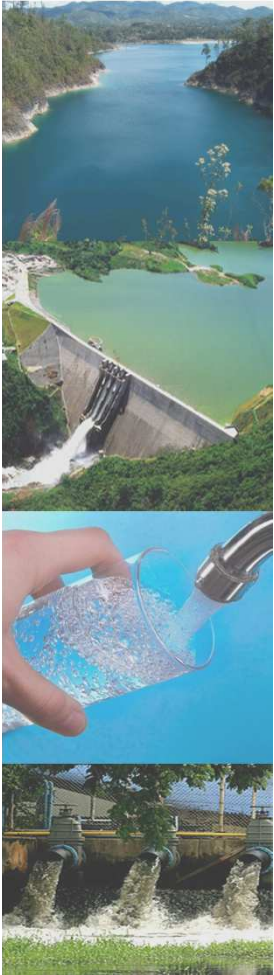
Water's contribution to the primary energetic matrix



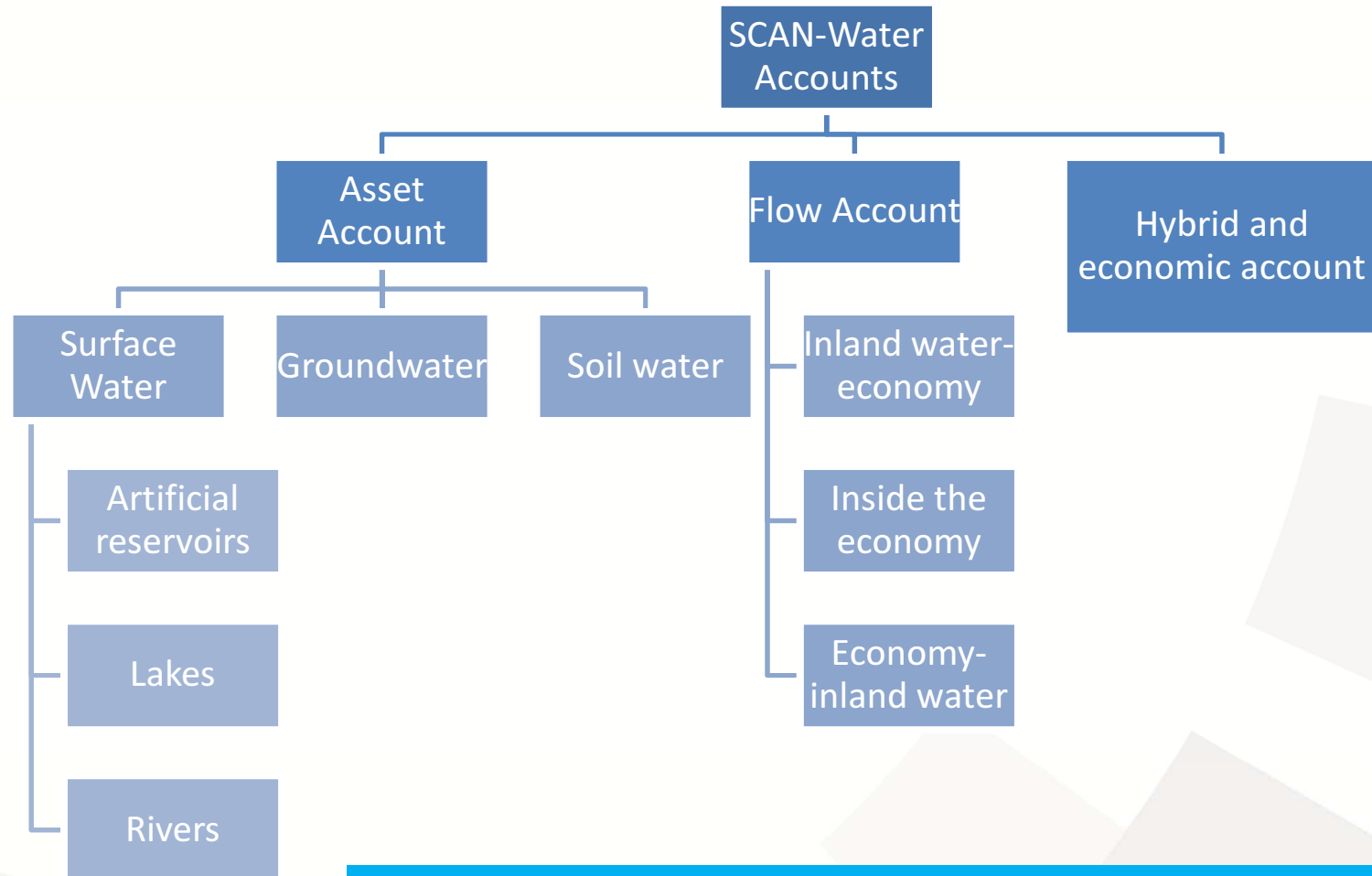
Fuente: Ministerio Coordinador de los Sectores Estratégicos
Elaboración: Equipo Técnico y consultor Proyecto Sistema de Contabilidad Ambiental Nacional (SCAN) del Ministerio del Ambiente (MAE).



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Water Accounting in Ecuador



According to ECLAC (2011), currently 60% of the information that is necessary to develop the water account, doesn't exist



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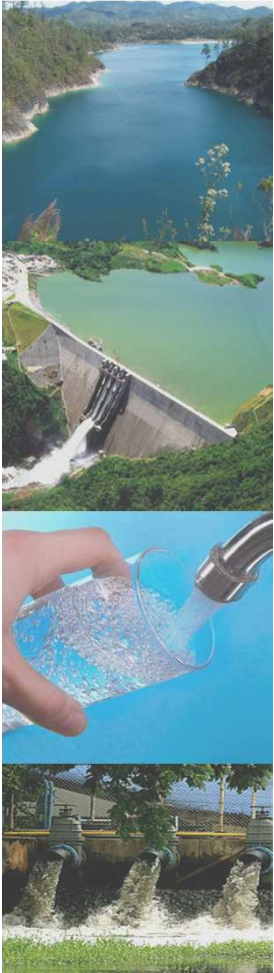
Water Accounting in Ecuador

Limitations of the information

The information is not reliable

Outdated and incomplete information

The country needs an efficient investment in equipment and facilities to get the information



Purpose of the Green GDP



Indicators of the SCAN

Some indicators

Stock's lifetime

Productivity

Intensity

PINAE

PINAE = Producto Interno Neto Ambiental del Ecuador. Environmental Net Domestic Product of Ecuador

Green GDP and aggregates adjusted with environmental costs in Ecuador

$$\text{Green GDP} = \text{GDP} - \text{CFK} - \text{EAD}$$

The costs of petroleum, natural gas, and wood forest resources depletion (SEEA, 1993)

Depreciation of the produced assets (SNA, 1968)



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Thanks!!

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