

STEP 3: Diagnose governance instruments

Governance Instrument	Description	Type	Level	S2S segment	S2S sub-segment	Relevance	Strengths of instrument	Gaps in instrument	Additional comments
Action Plan for the National Policy on Natural Resources and the Environment (1994)	The AP recognized watershed planning and helped establish Ethiopia as an early adopter of IWRM. It included an integrated approach to land management across Ethiopia and countrywide programme on soil conservation, including preferred extension services and early concerns around the impact of charcoal burning on forests. Key sections include <i>integrated land use and on-farm soil management: Given the tremendous erosive power of rainfall on bare earth, to develop, in participation with farming communities appropriate integrated cropping and soil management systems which maximize the length of time the soil is covered with live and/or dead vegetative and other materials.</i>	Strategy	National	Land system		Weak	The AP sets the scene for an integrated approach across Ethiopia, and this purpose has carried through the following decades. It includes references to water resources, and the connections to ecosystems, although it is more focused on water as an input into economic processes. Whilst more concerned with the land system, it would apply to the whole of the Basin.		Very old and doesn't appear to have been updated. Prepared 25 years ago. Sections on water rarely considered the impact of land use on water resources. It also didn't consider impacts of pastoral farming on sediment erosion, which has increased in significance as an issue. It's relevance was rated as low on this basis.
CRGE Climate Resilience Strategy: Water and Energy	The CRGE provides national and economy wide measures for responding to climate change. This component of the CRGE programme includes measures and funding relating to irrigation and to reducing reliance on wood fuel. It noted that irrigation can cause issues in lower catchments in terms of erosion whereas land use changes relating to wood fuel removes vegetation cover, which in turn contributes to erosion and sediment loads from upper catchments. 81% of Ethiopian households nationally rely on wood for domestic use, and it may be similar percentages across Hawassa, which support the connections to sediment found in the consultants report. It also noted that climate change may reduce biomass, putting further pressure on woodlots and forests. This may mean that if wood fuel biomass continues to be the main source of domestic energy, deforestation (by area) growth will increase as the same area of forest will not produce as much biomass for fuel compared with the present time. This has implications for erosion in the forested hillsides around Lake Hawassa. The Strategy also notes the need to enhance rainfed agricultural activities, which may reduce sediment erosion. This Strategy, in terms of water and energy, is implemented by both MoWIE and State Governments. Strategic Priority 3.3 refers specifically to the role of River Basin Councils in terms of action.	Strategy	National	Freshwater system		Moderate	The CRGE is well accepted within Ethiopia and referred to across national communications and policy. Building connections to the CRGE can enhance legitimacy of actions or program designed through S2L. Strategy supported at Ministerial level and funding has been made available for implementation. The Strategy would apply to all parts of the Basin and will have a high influence on plans and strategies, and used to supporting actions by Enabling and Supporting Institutions. It would support some level of horizontal coordination through the connections between erosion, deforestation and energy needs		THE CRGE predominantly has a national focus, and may not result in significant local investment, therefore how much funding to support actions Hawassa is questionable. The document notes the need to balance water demands but actions appear to be focused on demand-side only, leaving activities such as afforestation to other programmes.
Ethiopia's Constitution (1994)	The Constitution outlines the rights and obligations for all Ethiopians, as well as key institutions important to the functioning of the Republic of Ethiopia. The most relevant sections include: <i>Article 44 Environmental Rights: All persons have the right to a clean and healthy environment</i> in relation to sediment insofar as excessive sediment will affect the health of Lake Hawassa. <i>Article 51: Powers and Functions of the Federal Government: It shall determine and administer the utilization of the waters or rivers and lakes linking two or more States or crossing the boundaries of the national territorial jurisdiction as the Basin is shared across two Regional States.</i> <i>Article 52 Powers and Functions of States: (c) To formulate and execute economic, social and development policies, strategies and plans of the State;</i> <i>Article 92 Environmental Objectives 2 The design and implementation of programmes and projects of development shall not damage or destroy the environment. 4 Government and citizens shall have the duty to protect the environment</i> as this gives support to ensuring that development programs do not add to environmental degradation.	Policy	National	Land system		Moderate	The Constitution underpins all legislation in Ethiopia and provides a basis for the development and enactment of legislation, regulations and proclamations, mainly at Federal and State levels. As well as the rights, it also notes obligations on Governments and citizens that underpins provisions found in other Proclamations (e.g. relating to rural land use or forestry) in terms of providing or removing access to land). The Constitution is applicable across the whole Basin. Whilst the Constitution is of high relevance to vertical coordination of governance across Ethiopia, it is less relevant on a sectoral level but can be used to supporting actions by Enabling and Supporting Institutions.		General and very broad but needs to be acknowledged.

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Environmental Impact Assessment Proclamation No. 2991/2002	This Proclamation is concerned with managing activities that have an environmental impact on receiving environments, but is generally focused on managing larger-scale or more significant activities and projects as opposed to managing land use. In terms of sediment, the Proclamation may be relevant for managing sediment flow from development activities across the Hawassa Sub-Basin as well as managing sand mining occurring in both lower and upper catchments. However, the scale of individual sand-mining activities may be of a big enough scale to trigger such control. Regular and already established land uses, such as deforestation, afforestation, or agriculture, may not be significant enough, apart from larger investments in forestry or irrigation projects. "Impact" means any change to the environment or to its component that may affect human health or safety, flora, fauna, soil, air, water, climate, natural or cultural heritage, other physical structure, or in general, subsequently alter environmental, social, economic or cultural conditions;	Law	National	Land system		Moderate	The Proclamation gives a strong role to State Government and respective State Bureau/Agencies in managing environmental impacts derived from development. The definition of Impact and Pollutant would mean that sediment is included, and this may suggest a role of EIA units from State Governments in managing processes or activities that significantly increase sediment flows, including through the assessment of structure plans or development plans prepared under urban planning legislation. However, EIA are most concerned with new activities as opposed to managing existing activities. The most obvious application is sand-mining but large scale infrastructure projects such as roading may also create sediment flow. As the Consultant reports notes "Environmental Impact Assessment Proclamation (No. 299/2002) notified the mandatory requirements of some specified projects (public or private) to undertake timely EIA, identifying the likely adverse impacts, incorporate the means of their prevention with the support of qualified experts". The Proclamation may also apply to land use changes, and therefore may be in conflict with provisions that support growth in agricultural land uses. In terms of the Basin, sand-mining is found mainly in the lower catchments, although the gullies can act as access points meaning some connections to the upper catchment can be found. Globally, sand mining can be an issue in riparian areas or riverbeds but this has not emerged as an issue in this basin at present.		Many activities related to the generation of sediment will not be managed due to their small individual scales although they can have a significant effect through collective environmental degradation. In addition, many sources of sediment will not be controlled through this Proclamations because they are sourced from already existing activities as opposed to being new activities. The relevance of the Proclamation to sediment is assessed as medium as opposed to high as it may not support proactive action on most activities with the exception of sand-mining or new urban development.
Environmental Pollution Control Proclamation No. 3001/2002	This proclamation deals with Environmental Pollution in its many forms, including effluent, management of municipal waste, and Monitoring and Evaluation. It provides for an Environmental Protection Agency at the Federal level, as well as Regional Environmental Agency found at State levels. The definition of pollutant found in the Proclamation would potentially include sediment, but will definitely include solid waste and sediment derived from that sources. The Proclamation makes reference to the role of Courts dealing with environmental matters at Federal and State levels, and this is taken up further through other Proclamations. In terms of responsibilities, Federal Authorities are responsible for preparing standards, including waste management, nationally. The Proclamation also recognizes that that States may prepared Standards be more stringent than Federal standards, taking into account the needs in different locations. However, the status of Hawassa as crossing state boundaries could result in differing standards being applied. Whilst this Proclamation may be more relevant to managing plastic litter, solid waste may be responsible for significant amounts of sediment going into Lake Hawassa, especially as ash, as noted in the Consultants report (2019). As an example of provisions: <i>Any person engaged in any field of activity which is likely which is to cause pollution or any other environmental hazard shall, when the Authority or the relevant regional environmental agency so decides, install a sound technology that avoids or reduces, to the required minimum, the generation of waste and, when feasible, apply methods for the recycling of waste.</i>	Law	National	Land system		Moderate	As well as outlining roles of different authorities in managing environmental pollution in terms of vertical coordination, the Proclamation provides for the role of Environmental Inspectors within the respective institutions. These inspectors may be important for managing sediment flows from urban development and sand mining, especially on environmentally compromised sites, if they trigger intervention. The Proclamation is also applicable to ongoing sources of pollution, unlike the EIA Proclamation. It is most applicable within the lower catchment and also in relation to the riparian areas.		Whilst this Proclamation may be relevant to sand-mining or other activities that cause environmental pollution, it is unclear how much monitoring is undertaken by regional agencies or environmental inspectors in terms of this issue, and whether sand-mining is given a high priority. Various workshops undertaken within the S2L programme suggest that whilst sand mining is seen as a significant issue, overall control is limited as there is more support for the activity as an employment generator for youth and there are difficulties in fully allocating responsibilities.

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Environmental Policy 1997	This policy enacts the Constitution and prepares the way for further legislative activities such as Environmental Impact Assessment. The Proclamation particularly notes deforestation as an important issue in the Opening Summary, and notes that that soil erosion is a very significant problem in Ethiopia with broad impacts on GDP. <i>Specific Policy Objectives include e. To promote effective ground cover as one of the most important factors in soil erosion control, taking advantage of the wide range of sustainable agronomic, pastoral and silvicultural approaches used in various areas of Ethiopia as potentially flexible alternatives to mechanical soil conservation systems; f. To promote in drought-prone and low rainfall areas water conservation which is as important as physical soil conservation for more secure and increased biomass production, including crop production; i. To find substitutes for construction and fuel wood whenever capabilities and other conditions allow, in order to reduce pressure on forests.</i>						The Environment Policy provides significant support for managing sediment generated from many different sources. This is predominantly through vertical coordination, but some level of horizontal coordination is anticipated through provisions on cross-sectoral interactions between forestry, agriculture, and wood-fuel. Whilst sediments sourced from forestry and the expansion of agricultural activities are the main focus within the Policy, the Policy also notes challenges relating to mining, and this may extend to sand-mining activities.		While the EP still underpins environmental management in Ethiopia, and enacted Proclamations, it is relatively old and may require some amendment to better support more recent governance activities undertaken in an integrated way. IWRM has been a longstanding policy focus in Ethiopia, but good examples of implementation are limited.
Fisheries Development and Utilization Proclamation No. 315/2003	This proclamation provides the framework for managing Fisheries across Ethiopia. It has limited provision are applicable to sediment management, although it may provide support for interventions through and application of 8. <i>Environmental Protection: The concerned organs of the Federal or Regional Governments shall ensure that development programmes and projects are drawn up in such a way that they will not have direct or indirect negative impact on the fisheries resource constituted in the basin where the programmes or projects are intended to be implemented.</i>						The Fishery sector is reliant on adequate fish stocks in Lake Hawassa. Sediment flows can impact on Lake Hawassa fish stock in a negative way, including smothering lake bed shallows and impede fish recruitment, increasing nutrient flow and increase or maintain algal blooms, or reduce transport options on the edges of the lake. In terms of managing sediment, the Proclamation provides support to the industry being involved in discussions around managing sediment, but overall would have a low relevance to management discussions.		Limited use in direct actions around sediment flows that are land-based, but is useful to how support indirect actions such as the development of plans.
Forest Development, Conservation and Utilization Proclamation No. 1065/2018	The Proclamation notes importance of Forests and Forestry to Ethiopia, and includes provisions for managing state forests, community forests, protected forests, preserved forests, private forest developers, amongst others. For example, <i>WHEREAS forest development, conservation and utilization has a decisive role in preventing soil erosion, desertification and loss of biodiversity.</i> The Proclamation contains detail on rights and obligations for different forest users, according to the types of forest under different managements regimes. The Proclamation also outlines various duties for the Federal Ministry and Regional Government in respect to forests. For example, for managing sediment, the most relevant includes <i>Federal Government shall: 6/ Provide technical and material support to the regions to establish a sustainable and modern forest development, conservation and utilization system ; whereas Regional Government 6/ Shall establish or provide the institutional arrangements, budget allocation and manpower required for the implementation of this Proclamation ;</i> This would indicate a key role for State Governments in sediment emerging from forests. Forests are still prominent on the eastern slopes, but the Consultants report indicates significant land use changes from forestry to agricultural activities over time, and this is expected to continue. Upper catchments, often forested, are indicated as hotspots	Law	National	Land system		Moderate	The gullies that form an important flow source have often emerged from deforestation activities, whilst the ongoing sourcing of wood fuel indirectly supports land use change as biomass is removed. Belete (2019) report noted that the forest degradation at the source of sediment erosion could have been well managed if stakeholders more strongly execute this proclamation that advocates participatory forest management planning. The report went onto note that the major constraints in forestry development in the sub-basin are land and tree tenure, population pressure, land shortage and high demand for agriculture, deforestation, and a lack of collaboration among the concerned institutions. Some of its provisions may come into conflict with provision supporting the expansion of agriculture onto forested lands, which are increasingly rare in the Sub-Basin.		Whilst forest activities should be included within IWRM planning and the Basin Plans being prepared by the RVLBDO, implementing this provision is dependent upon the coordinated involvement of State Bureaus involved in managing forests and forestry within wider planning around sediment reduction. Whilst erosion is regularly noted as a concern at Federal levels, it is unclear how much funding is made locally to carry out rehabilitation works. Observations suggest that works are usually carried out as part of community service and that there are limited physical or financial resources available.
Agriculture and Natural Resources Sector Growth and Transformation Plan II (2015-2020)	The GTPII is an important Strategy at the Federal level, especially given the project impact of climate change on Agriculture in Ethiopia, including soil erosion. <i>2. Strategic Objective 2: Reduce Natural Resource Degradation and Improve Its Productivity. 3. Enhance and strengthen watershed development works. Goal 2.2: Expanding and Strengthening Watershed Development Activities. 2.6.1 Enhance and Strengthen Watershed Works. 6.2 Watershed and Forestry Development (a) To develop an incentive structure for farming households to invest in watershed development and sustainable farming.</i>	Strategy	National	Land system		Moderate	The direct impact of this plan on activities within the Basin is mixed, but it provides strong national support for taking a watershed based approaches to development, including the involvement of communities in projects devoted to reducing sediment flows. This means that substantial indirect pressure. This support also extends to expanding capacity building and developing an incentive structure for activities related to watershed management. This Strategy supports activities in both upper and lower catchment areas, and has medium relevance for approaching the sediment issue. Funding through support for the GTPII could be directed to erosion control, but more importantly, actions need to acknowledge this plan. The plan is useful in terms of horizontal coordination.		The Plan is applied at a national level and it is unclear how much support makes it to the Basin level.

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Irrigation Water Users' Associations Proclamation No. 841/2014	This proclamation helps to manage demand for limited water resources. Of note in terms of water governance is the following provision: <i>An association formed pursuant to this Proclamation shall have the objectives to: 4/ take appropriate measures to combat erosion, salinity and pollution; Each association shall operate in accordance with the following guiding principles: 2/ preventing wastage and pollution of water, combating erosion and salinity of soil and, protecting and administering irrigation and drainage system within the operation area so as to strengthen protection of the environment.</i> Large scale irrigation activities are not evident in the Lake Hawassa Sub-Basin, but community scale irrigation does occur. Should irrigation expand as part of development or through building climate resilience, more projects may emerge.	Law	National	Freshwater system		Weak	This Proclamation will be important if expansion of irrigation occurs in the lower catchments around Lake Hawassa. The workshops noted that the western side of Lake Hawassa has historically seen vegetable growing as well as maize, and there may be plans to invest in the wider basin to meet growth from the Hawassa Urban areas. It is mainly applicable to the lower catchment areas, and potentially riparian areas around the Lake and rivers, but its overall relevance is low.		No specific weakness in terms of managing sediment
Climate Resilient Green Economy National Adaptation Plan (2019)	The NAP was only released in 2019 and recognizes that investing in soil and water harvesting is an important activity. Provisions of note include <i>4. Improving soil and water harvesting and water retention mechanisms.</i> The SNNPR specifically includes <i>AO4 Improving soil and water harvesting and water retention mechanisms</i> , whilst in Oromia <i>AO3 Strengthening sustainable natural resource management through safeguarding landscapes and watersheds.</i> In addition, <i>deforestation, landslides, pest infestations, soil erosion and water pollution are among the environmental problems that have emerged in the country, creating further challenges for rural livelihoods,</i> and this NAP is intended to provide <i>budgetary support.</i>						The NAP provides an important role for managing watersheds as a major component for responses to climate change impacts. Some budget will be made available, and an action plan on sediment may be able to access funding from this source if an explicit connection to climate change exacerbating the present challenges around managing sediment can be made. Whilst it is assessed to be medium relevance, this may change to high relevance in the future as activities and plans are aligned more strongly with the NAP.		The NAP is a national document and may not result in significant resources distributed locally. The NAP has also only just been approved and it is unclear whether associated budgets and plans are also approved and how this will be managed, including the alignment of present Federal, State or Local plans.
A Proclamation to Provide for the Establishment of Oromia Bureau of Land and Environment Protection. Proclamation 147/2009	This proclamation is applicable to activities occurring within the Oromia component of the Lake Hawassa Basin. It outlines the framework for managing land-uses and planning along with the initiation of a Bureau to help manage this process. The Proclamation is particularly relevant to the implementation of Environmental Impact Assessment and Environmental Pollution measures. Provisions of note <i>"Land Use Planning," means a practice whereby the options that provide greater economic benefits without causing land degradation and environmental pollution are determined and implemented from among the different use options a land can give on the basis of physical, social and economic information.</i> <i>7) "Environmental Protection," means the protection of any resource at any place from hazardous pollution and dirt and taking care for sustainable use.</i> <i>12) Regulate and follow up that any development activity is planned and implemented without damaging the environment;</i> <i>17) Promote and develop public awareness on land use and environmental protection at all levels.</i>	Law	State	Land system		Moderate	This Proclamation supports the creation of the Bureaus that can apply environmental impact assessment and environmental pollution control in parts of the Sub-Basin, but more importantly, outlines and defines the role of these Bureaus in applying land use planning. It would have relevance across the whole component of Oromia found in the sub-Basin, and would be highly relevant across upper and lower catchments and riparian areas.		No specific weakness noted, as water and connections to water through land management are included within the definition of environment.

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Oromia Region Rural Land Administration and Use Regulation No.151/2012	This Proclamation is highly significant for the Governance framework as it sets out the various responsibilities of different institutions within the Oromia Region. At the Rural Land Use plan is important for demarcating appropriate activities for different parts of the Sub-Basin, including those which may be important sources of sediment flow. The plans developed under this proclamation should take a watershed approach, and all users will have rights and obligations under its auspices. Of particular note are provisions surrounding the types of activities that can be undertaken in already degraded locations. Provisions include. 1. <i>The Bureau shall conduct study and prepare at all level land use planning based on watershed that considering the socio-economic development, the natural resources situation, current land use and etc. of the region with full participation of the community.</i> 2. <i>Any person who has the rural land use right shall be prohibited to flow his land in a way that resulted in erosion of soil.</i> 3. <i>Causing soil erosion that result in devastation of grasses due to over grazing is prohibited.</i> 22. <i>Protect and Conservation of Sloppy Lands, Mountainous, Hills and Gorges</i> 2. <i>Any person who has the right to use rural land is obliged to use the sloppy and hilly land only for the recommended purpose by keeping slopes determined by professionals.</i> 3. <i>Gorge lands or degraded lands shall be protected by planting selective plants like coffee, mango, avocado, and other fodder trees and are forbidden to use for crops or for free grazing.</i> 1. <i>The remnant forest lands on farmland, grazing land, stream banks, and hilly areas, shall not be used for farm lands by eliminating remnant forest.</i>	Regulation	State	Land system		Moderate	This State Proclamation is important for developing activities that mitigate sediment flow from land uses, including both agricultural uses as well as pastoral. It outlines roles for different institutions within the region in terms of implementation, highlighting the role of State Bureaus, thereby supporting vertical coordination. Importantly, in terms of biophysical attributes, it specifically outlines the need to protect highly sloped hillsides and forest remnants found in the upper catchments, which would include those in the Lake Hawassa basin. Watershed Plans are explicitly noted as a requirement. It also notes that role of the Bureau in providing information to Investment Offices, and therefore the connection to that Ministry. It is less likely to impact on Urban land sources, with the exception of peri-urban areas found around Hawassa and other sub-cities found in the Basin.		The key weakness found in the document is the lack of many explicit connections between land uses and associated receiving waters, with the exception of provisions found in regards to forest remnants. Whilst water connections are found throughout the proclamation, it is unclear how much these are included within watershed based land use planning undertaken by Oromia State Government, or to the Basin Plans prepared by the RVLBDO.
River Basin Councils and Authorities Proclamation No. 534/2007.	This Proclamation brings into force a more integrated approach to water resources management in Ethiopia, and helps to enact various provisions found in the Constitution and other strategies, policies and proclamations found across Ethiopia. The River Basin Councils were set up as a new component of Governance within Ethiopia, and to give effect to the ongoing promotion of IWRM. The RBC's have an important role in providing knowledge and guidance to other regulatory agencies, especially through the vehicle of the mandated Basin plan as well as the role of activity coordination, including both vertical and horizontal. This is especially relevant in addressing sediment as there are many different sources of sediment found in the Basin, each being governed under different Proclamations and by different institutions.	Law	National	Freshwater system		Moderate	The main strength of this Proclamation is its highly integrated approach, and relatively high detail of the roles and responsibilities of the River Basin Councils. Such an approach allows for a wider perspective on the challenges relating to managing water compared with Regional States, and the Basin Plan may be an important tool for coordinating activities from many different agencies, especially with the provisions for setting up a forum and the provision policy guidance designed to implement IWRM across the Basin. The Proclamation has a direct connection to the Lakes, Rivers, and Riparian areas, and an indirect connection through IWRM to the upper and lower sheds in terms of managing sediment. Its relevance is assessed as high as it is supportive of coordinated actions in terms of managing impacts of land based activities on water, predominantly through the basin plans created throughout the Rift Valley Lakes Basins, but may be medium in terms of the <i>lower catchment</i>		It is noted that the Basin Plan will strongly support direct actions in relation to water management and allocation, but is less relevant to activities such as erosion control. The Basin Plans will not be able to be used to compel actions to be taken by other authorities, with the exception of water permitting. Many of the regulatory actions or budgetary support needed to manage sediment flows are undertaken by other agencies and under different Proclamations, and while there is a duty to cooperate with the Basin Planning process, it is unclear how much provisions in these Basin Plans are operationalized through watershed and other land use plans made by Regional Authorities.
Federal Democratic Republic of Ethiopia Rural Land Administration and Land Use Proclamation No. 456/2005	The Proclamation provides for the rights and obligations around land use across Ethiopia, including the development of rural land use plans, use of degraded or marginal lands, and the various roles of Federal and Regional State authorities. Provisions of notes include: 1/ <i>A holder of rural land shall be obliged to use and protect his land. When the land gets damaged, the user of the land shall lose his use right.</i> 3/ <i>In any type of rural land where soil and water conservation works have been undertaken a system of free grazing shall be prohibited and a system of cut arid carry feeding shall be introduced step by step.</i> 7/ <i>Rural land of any slope which is highly degraded shall be closed from human and animal interference for a given period of time to let it recover, and shall be put to use when ascertained that it has recovered. Unless the degradation is caused by the negligence of the peasant farmers, semi pastoralist and pastoralist the users shall begin compensation or other alternatives for the interim period.</i> 8/ <i>rural lands that have gullies shall be made to rehabilitate by private and neighbouring holders and, as appropriate, by the local community, using biological and physical works.</i> 9/ <i>Rural lands that have gullies and are located on hilly areas shall be rehabilitated and developed communally and as appropriate by private</i>	Law	National	Freshwater system		Strong	This Proclamation sets the basic conditions of rural land use across Ethiopia, and the responsibilities of various agencies and institutions. Whilst it is primarily interested in the appropriate distribution of land, it still outlines why certain lands may or may not be available for use. The Proclamation also outlines the responsibilities of the Targeted Stakeholders in terms of managing the land appropriately. Belete (2019) notes that Rural Land Administration and Land Use Proclamations define the rights and obligations of users of rural land, including traditional subsistence farmers. Thus, protection of land becomes an obligation and failure to protect can lead to loss of title. Belete (2019) also noted that farmers are not practicing the appropriate soil and water conservation measures in their farm against their obligations set by the rural land users, and land use restrictions. It is assessed as high relevant to most sediment management activities throughout the rural parts of the Sub-Basin.		The main weakness of this document is that only concentrated on the basic aspects of rural use in Ethiopia, leaving any detail to the Regional States Governments to implement. Whilst this is expected within such a devolved approach, it can create difficulties within basins that cover two more regional states, as is the case in the Lake Hawassa Basin.

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The Southern Nations, Nationalities and Peoples Region Rural Land Administration and Use Proclamation No.110/2007	This Proclamation is highly significant for governance in Lake Hawassa as it sets out the various responsibilities of different institutions within the SNNPR Region. The rural land use plan is important for demarcating appropriate activities for different parts of the Sub-Basin, including for soil conservation and mining. The plans to developed under this proclamation should take a watershed approach, and all users will have rights and obligations under its auspices. Of particular note are provisions surrounding activities that can be undertaken in already degraded locations.	Law	State	Land system		Strong	This Proclamation enacts and parallels similar Proclamations found at Federal levels, and repeats many of the Provisions found therein. It does, however, differ slightly as there is more attention paid to the needs of women and youth in terms of rural land distribution compared with the former document. Belete (2019) report notes that Rural Land Administration and Land Use Proclamations define the rights and obligations of users of rural land, including traditional subsistence farmers. Thus, protection of land becomes an obligation and failure to protect can lead to loss of title. The Report also noted that farmers are not practicing the appropriate soil and water conservation measures in their farm against their obligations set by the rural land users, and land use restrictions. The Proclamation is important in managing existing activities that create sediment, not just new activities or land use change, and is an important component of governance.		The key weakness for this Proclamation is that it is mainly derived from the National Proclamation and includes little that is context specific to SNNPR. For example, unlike the similar Proclamation found in the Oromia equivalent, there are no provisions in relation to watershed planning found in this Proclamation. Whilst there may still be rural land use plans found in the region, these may be less issue connected than a watershed plan would likely be.
Urban Local Government Proclamation of the Oromia Proclamation No. 65/2003	This State level Proclamation sets out the responsibilities for lower tiers of governance when managing of urban areas. Provisions of note in respect to sediment management include 7. Objective of Urban Local Governments; 3. ensure the provision of efficient and equitable urban services to residents in a sustainable manner; 6) promote a safe and clean urban environment suitable for development, work and residence; 9) Functions of Urban Local Governments; (a) To provide efficient, effective and equitable services to the residents; especially environmental services construction and management of city roads, sewerage and drainage lines, parks and recreation areas, waste disposal, prevention and control of pollution etc.) to prepare, revise, update and implement its city plan 45. Establishment An urban local government may establish a city court severally or in conjunction with other neighbouring cities. Details shall be defined by Regulations of the Regional Executive Council. 47. Jurisdiction of the Court The city court shall have exclusive jurisdiction over the following cases: 1) Implementation of urban planning laws; 2) Housing and urban land use 4) Environmental sanitation; 5) Municipal services; and BUREAU OF INDUSTRY AND URBAN DEVELOPMENT 53. Urban Local Governments and the Bureau The Bureau shall 1) Without prejudice to other functions given to the Bureau in other laws, the Bureau shall have the power to lead the affairs of urban local	Law	State	Land system		Weak	Limited applicability around Lake Hawassa in the portion of Oromia, but as the population growth, it may be required at a later date. Provisions are mainly applicable around the lower catchments where urban growth may occur.	Limited applicability to issues around sediment, especially in the relatively flat parts of Lake Hawassa.	

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A Proclamation to Provide for Urban Plans Proclamation No. 574/2008	This Proclamation provides the foundation of urban planning and activities across Ethiopia. Provisions of note include: <i>2/ to regulate and facilitate development activities in urban centres and thereby enhance economic development of the country;</i> <i>5. Basic Principles</i> <i>3/ consideration of inter-urban and urban-rural linkages;</i> <i>7/ safeguarding the community and the environment;</i> <i>18. Urban Plan Implementation</i> <i>There shall be clear strategy, regulations, directives and organized executive organs to support the implementation of urban plans.</i> <i>20. Power to Implement Urban Plans</i> <i>Every chartered city or urban administration shall, in the implementation of urban plans, have the powers to:</i> <i>3/ coordinate, to the extent necessary for the implementation of the plan, the activities of government offices, development enterprises, service rendering institutions, private undertakings and other stakeholders operating within the area.</i> <i>26. Underlying Principles</i> <i>The following principles shall be adhered to in any process of development authorization: 1/ ensuring economical and sustainable use of land; 2/ ascertaining the support of environmental impact assessment study with respect to development projects likely to have major environmental repercussions; 3/ provision of basic infrastructure during land allocation for development</i>	Law	National	Land system	Urban	Moderate	The main strength of this Proclamation is its highly integrated approach with regards to urban planning, and relatively high detail of the roles and responsibilities of urban authorities. Such an approach allows for a wider perspective on the challenges relating to managing waste. The Consultants report noted the high content of ash and dust within solid waste, echoing an earlier report from the World Bank on the same matter. In addition, ongoing land use changes moving from rural to peri-rural to urban land can generate erosion, depending on local conditions. In addition, sediment often collects within local drainage and the way this is managed will have an impact on sediment flows from urban areas. It was assessed as medium relevance in terms of managing land development and sediment sourced from solid waste in urban areas.		Limited applicability to issues around sediment beyond the urban areas, especially in the relatively flat parts of Lake Hawassa.
Ethiopian Water Resources Management Regulations Council of Ministers Regulation No. 115/2005	This Proclamation is primarily concerned with the policy framework around the issuance of water permits, the transmission of wastewater into receiving bodies, the development of new water sources, and the Water User Cooperative Associations that may initiate irrigation infrastructure. There are limited provisions applicable to sediment, although ill-managed irrigation can result in sediment issues.	Regulation	National	Freshwater system		Weak	Limited applicability with the possible exception of managing irrigation works construction and possible erosion around watercourses that emerge from that source. Provisions are mainly applicable around the lower catchments. However, the Regulation could have more impact in the future if there is increased investment in irrigation as part of the NAP.		Limited applicability
Ethiopian Water Resources Management Proclamation No. 197/2000	The Proclamation sets out the national approach to water resources management, including the use of Basin management, controls around water pollution, and the promotion of IWRM. It sets out provisions in relation to both water bodies and the bank or riparian areas of water bodies. Several provisions in the Proclamation are of note in regards to sediment flows. These include: <i>16) "Banks of water bodies" means land whose boundaries and/or distance is determined by the Supervising Body and by the relevant Public authority and includes any area on which water body exists.</i> <i>19) "Water resource management" means activities that include water resources development, utilization, conservation, protection and control.</i> <i>2) The social and economic development programmes, investment plans and programmes and water resources development activity of any person, shall be based on the country's Water Resources Policy, relevant Basin Master Plan Studies and Water Resources laws</i> <i>25. Protection of Banks of Water Bodies</i> <i>The Supervising body, in collaboration and in consultation with the appropriate public body may:</i> <i>1) Delimit the boundaries of the banks of certain water bodies;</i> <i>2) Prohibit clearing, cutting trees or vegetation and construction of residential houses within the delimited banks of water bodies. The date of delimitation shall be determined by the Supervising Body.</i>	Law	National	Freshwater system		Moderate	The key strength of this Provision is that it provided legislative support for undertaking IWRM across Ethiopia, including the roles and responsibilities of different institutions as well as the use of master plans. Belete (2019) noted that the Proclamations covers certain elements of water resources management including soil and water conservation measures to reduce sediment soil erosion and lakes siltation; local community participation in sub-basin management and water conservation measures and practices; a recognition of wetlands as a key feature in watershed management. It is applicable to most parts of the sub-basin, but with an emphasis on water bodies and associated banks and sediment derived from this source.		The main weakness of this Proclamation is that it doesn't clearly delineate the management roles of different agencies in relation to some sources of sediment such as forested areas and this may need to be taken into account in future action planning.

Governance Instrument	Description	Type	Level	S2S segment	S2S sub-segment	Relevance	Strengths of instrument	Gaps in instrument	Additional comments
Conservation Strategy of Ethiopia	<p>This Strategy, in concert with the Environment Policy and the Constitution provides the foundation for environmental management and associated Proclamations and institutional agendas, and activities across Ethiopia. A number of the sections and policies may reference to concerns over erosion and land degradation. These include:</p> <p><i>Here in this ecologically fragile environment rainfed cropping is causing soil erosion on unsuitable soils and increasingly sedentarised herds are causing both soil and pasture degradation.</i></p> <p><i>Land degradation has many expressions including soil removal by sheet and gully erosion, nutrient depletion due to burning of dung and other forms of biomass, nutrient loss due to crop removals without replacement and the continued loss and degradation of forest areas contributing to all of the above. Effective ground cover should be seen as one of the most important factors in soil erosion control and a wide range of sustainable agronomic, pastoral and silvicultural approaches used in various areas of Ethiopia. The underlying and deep rooted causes of land degradation have been to a very large degree the result of government and policy failures over the millennium with particular respect to natural resource management.</i></p>	Strategy	National	Multiple		Moderate	As noted in Belete (2019), the Conservation Strategy of Ethiopia provides a framework for integrating environmental planning into new and existing policies, programmes and projects. The Conservation Strategy of Ethiopia and the environmental policy of Ethiopia (EPE 1997) provides a framework for integrating environmental planning into new and existing policies, programmes and projects. It recognizes the importance of incorporating environmental factors into development activities from the outset, so that planners may take into account environmental protection as an essential component of economic and social development. Whilst applicable to Enabling Stakeholders in terms of providing support on sediment management actions and applicable legislation or regulation, it was assessed as low relevance as it isn't directly relevant.		The Conservation Strategy underpins most environmental legislation in Ethiopia, and recognizes the important issue of land degradation. But many of the activities in the strategy may be outdated.
Agricultural Development Led Industrialization	<p>This Strategy is a longstanding instrument for Ethiopia. It envisages using agricultural development as the engine for economic diversification and industrialization. It is still the government's core policy for rural development as well as overall economic development throughout Ethiopia. The Strategy helps to encourage an expansion of agricultural activities that may exacerbate soil erosion through land use changes or more intensive uses of land.</p>	Strategy	National	Land system		Strong	This strategy stresses the importance of improvements in existing agricultural land productivity, in order to increase agricultural activities and to catalyse the expansion of industries that process agricultural outputs. It has formed a key part of Ethiopia's development strategy since its inception. This strategy has limited impact in terms of managing sediment flows but as it has an impact in driving increases in agriculture land conversion across Ethiopia.		As the Strategy helps to encourage an expansion of agricultural activities that may exacerbate soil erosion through land use changes or more intensive uses of land, it is dependent on other strategies or Proclamations to managed the impact from this expansion.
RURAL DEVELOPMENT POLICY AND STRATEGIES(2002)	<p>This strategy outlines Ethiopia's position on rural development and how it is based upon the Government Ownership and allocation of land. The various Proclamations promulgated at Federal and State level support this position, along with the rights and responsibilities with being allocated land. It also details the roles of different institutions in rural development. The Strategy displays a preference for improving productivity of established land as opposed to increasing the amount of land devoted to agricultural and horticultural uses. For example: <i>Our agricultural development strategy seeks to increase productivity on lands suitable for farming through the use of improved technologies and water conservation measures. As output per land holding increase, farmers will be less likely to expand into forests and hillside, which would otherwise aggravate soil erosion. Nevertheless, hillsides and forested land will be most effectively protected only if suitable and appropriate uses can be found for them.</i></p> <p><i>Hence, we will promote the use of hillsides for pasture, or for various plants, which do not require farming proper, but will allow farmers to obtain some income from such lands.</i></p>	Policy	National	Land system		Moderate	This Strategy continues to play a role in the development and implementation of other strategies and regulation relating to rural land use and development. It is quite clear that soil erosion should be avoided but also notes the need to take measures that make the hillsides more productive. Federal Rural Development Policy pays attention to the land tenure issue and the proper use of land, although these standards are left to other documents. The objective of this policy is that it promotes the expansion of agricultural activity, but mainly on existing lands.		As the Strategy helps to encourage an expansion of agricultural activities that may exacerbate soil erosion through land use changes or more intensive uses of land, it is dependent on other strategies or Proclamations at State or Federal levels to manage impact from this expansion.
Food security strategy (2002)	<p>The improvement of food security and agriculture has been a longstanding commitment by the Republic of Ethiopia. Whilst much of the strategy is concerned with increasing agricultural production, it also raise a concern in regards to the impact of pastoralism. Provisions of note include: <i>57. Increases in human and livestock populations have put pressure on rangeland resources resulting in soil erosion, deforestation and bush encroachment, thus increasing the vulnerability of pastoral communities. Improving livestock development and diversification outside pastoralism or directing to agro-pastoralism will strengthen their economic base and reduce their food insecurity.</i></p>	Strategy	National	Land system		Strong	This strategy continues to underpin other efforts in building food security in Ethiopia, but also recognizes the pressure that this has in terms of land degradation.		No Specific weakness.
Hawassa City Bylaws	<p>Hawassa city bylaws give effect to Regional States legislation. These bylaws are likely to include solid waste provisions, and this may effect sediment being sourced from urban areas.</p>	Regulation	Municipal	Land system		Moderate	Specific provisions should be obtained		Specific provisions should be obtained

Governance Instrument	Description	Type	Level	S2S segment	S2S sub-segment	Relevance	Strengths of instrument	Gaps in instrument	Additional comments
Wereda Bylaws	Wereda is the next level of governance below regional states and bylaws give effect to the Regional State legislation. 70% of local funding is sourced from the State, and local plans are developed and enacted at the local level. Most of the sediment generated in the Lake Hawassa Basin is sourced from various rural weredas, and local bylaws may be in existence.	Regulation	Local	Land system		Moderate	Specific provisions should be obtained		Specific provisions should be obtained
Kebele Bylaws	Kebeles are the level of governance that sits below Weredas, and may have provisions or bylaws applicable to the management of sediment.	Regulation	Local	Land system		Moderate	Specific provisions should be obtained		Specific provisions should be obtained
Oromia Plans	Oromia Regional State prepared a number of plans and strategies in accordance with the powers granted it, along with key Proclamations made nationally. Funding and resources are made available through funding used to support the States activities, and there for this will have an influences on funding made available for addressing sediment issues, both state-wide and at lower governance levels. Only a small proportion of the Basin is found in Oromia State.	Plan	State	Land system		Moderate	Specific provisions should be obtained		Specific provisions should be obtained
SNNPR Plans	SNNPR Regional State prepared a number of plans and strategies in accordance with the powers granted it, along with key Proclamations made nationally. Funding and resources are made available through funding used to support the States activities, and there for this will have an influences on funding made available for addressing sediment issues, both state-wide and at lower governance levels. Most of the wereda and kebeles found in Lake Hawassa Basin are found in the SNNPR region.	Plan	State	Land system		Moderate	Specific provisions should be obtained		Specific provisions should be obtained
RVLDO Basin Plans	Basin Development Authorities are granted a number of power under the Rivers Basin Council legislation, mainly in terms of providing longer term strategic planning for water resources that is implemented according to IWRM approaches, and for the protection of water resources from overallocation or in the physical vicinity of water bodies. Both the original basin plan as well as the present draft make extensive reference to sediment, especially in terms of its impact and source, but are more limited in terms of responses, except for recognising the role of ME FCC. While the basin plan recognises the role of different institutions in managing sediment, it does not appear to act as a coordination mechanism of different agencies.	Plan	Basin	Freshwater system		Moderate	Present and Future Basin Plans should be assessed		Present and Future Basin Plans could be assessed
Hawassa City Administration Master Plan	Sediment derived from urban locations can be highly significant for Lake Hawassa, and due attention should be paid to land development activities that generate sediment that flows into Lake Hawassa.	Plan	Municipal	Land system		Moderate	Specific provisions should be obtained		Specific provisions should be obtained
NatureRes Protecting Lake Hawassa Stewardship Project	This Project, supported by GIZ provides for the collaboration of multiple public and private stakeholders in protecting and rehabilitation of Lake Hawassa, mainly through managing land impacts in the contributing sub-Basin.	Agreement	Basin	Freshwater system		Moderate	The main strength of this agreement is that it can help coordinate a wide variety of institutions efforts in the pursuit of improved outcomes, identify priorities for action, and funnel resources to priority actions. It is applicable across the whole Sub-Basin.		The main weakness of this group is that there is limited resources available.
Sustainable Land Management Investment Framework	This longstanding national approach and framework is aimed at the restoration, maintenance, and enhancement of the productive function of land across Ethiopia. The improved use and management of land is supported to leading to improved economic and social well-being of those who depend on these resources while preserving the ecological functions of these lands. The Framework has long recognized that that land degradation is a serious issue with economic, social, and environmental problem consequences in Ethiopia. It supports efforts to protect and rehabilitate the stability, functions of, and services derived from natural ecosystems. This is carried out through actions at community planning levels, through enhance monitoring of land, and to share experience and knowledge across Ethiopia. Improved land tenure is also a feature of the Framework.	Strategy	National	Land system		Moderate	The main strength of this Strategy is that it provides resources and investment for strengthened land management across Ethiopia. It is applicable throughout the rural areas of the Lake Hawassa Basin.		The main weakness of this is that clear connections to water are not articulated.

Governance Instrument	Description	Type	Level	S2S segment	S2S sub-segment	Relevance	Strengths of instrument	Gaps in instrument	Additional comments
SNNP Regional Government Fisheries Development, Management & Control Regulation (Proclamation No. 62/1999; 78/2004) & Directive (2007)	The State Proclamation has some relevance to sediment management, especially close to water bodies. Provisions of note include: 3. <i>Without Prejudice to the provision of this Article sub-Article 2 for the purpose of maintaining of natural balance in the in the water bodies, it is forbidden to till any surroundings land of any water body in radius of 1 km.</i> 4. <i>The bureau shall ensure that development programs and projects are drawn up in such a way that they will not have direct or indirect negative impacts on the fisheries resources constituted in the basin where the programs or projects are intended to be implemented.</i>	Regulation	State	Freshwater system		Weak	The Fishery sector is reliant on adequate fish stocks in Lake Hawassa. Sediment can impact on the Lake Hawassa fishery in several ways, including smothering lake bed shallows where fish recruitment is found, affecting fish gills and growth, or potentially creating transport issues. The Proclamation gives support to the industry being involved in discussions around managing sediment, but more importantly sources of sediment close to water bodies. Some use in direct actions around sediment flows that are land-based and within 1km of the water bodies.		The main weakness is that there are fewer direct actions that connect fisheries with solid waste management.
National Integrated Water resources management Program	At present, this appear to only be a draft version, but it is likely to provide direction of water management in Ethiopia. It outlines the basic structure of water governance in Ethiopia, supports consistency in managing environmental pollution, and allocation of responsibility to different institutions that influence waste management. Provisions of note include: 4. <i>To support major towns to come with systems for safe disposal of urban liquid and solid waste management The Basin Administration Directorate of MoWE carry out watershed development activity, particularly in areas where reservoirs are vulnerable to erosion the co-benefit of which is improving agricultural productivity. Although the priorities in the intervention may differ, the activity could be harmonised to address both concerns.</i>	Strategy	National	Freshwater system		Weak	This programme will underpin investments made at the national level in regards to water management, including wastewater, sanitation and solid waste. However, until it comes into effect, it will have little direct influence in terms of planning and budgeting.		Not in effect