

## STEP 2: Engage

Stakeholder Name	Description	Category	Level	S2S segment	S2S sub-segment	Interest	Influence	Activities	Additional Comments
Farmers	Farming activities are highly significant in the Sub-Basin. Such activities are not limited to rural areas, but can be found in urban and peri urban areas also. Plastic litter impacts on farming communities in several ways, including entry into the food chain.	Primary	Local	Land system	Urban/Rural	Moderate	Weak		Provide social backing for changes. Relieving or reducing the impact of the flow on this stakeholder is a key indicator of successful interventions. Reducing the probability of plastic litter entering the food chain i.e. urban dairy farming is a key outcome.
Fisherman	Fish is an important source of local protein as well as a resource used to support the tourism industry. Plastic litter can impact on fisherman in many different ways including impacts on recruitment, product quality, fish catch, and ease of transportation	Primary	Local	Freshwater system	Lake	Moderate	Weak		Provide social backing for changes. Relieving or reducing the impact of the flow on this stakeholder is a key indicator of successful interventions in terms of improved fishery ecosystems.
Municipalities (Urban Authorities)	Urban authorities are a unit of governance that provides services, but can also be affected by impacts of plastic litter, including increased costs due to clean-up, damage to infrastructure, and impact on reputation. Sanitation services are a very costly activity for most municipal services, and efforts to reduce plastic litter at source can result in cost-savings downstream.	Primary	Municipal	Land system	Urban	Moderate	Strong		Relieving or reducing the impact of the flow on this stakeholder is a key indicator of successful interventions, especially frequency/intensity of urban flooding events, as well as costs associated with litter clean-up or impact of municipal infrastructure. It is noted that litter collection is a key activity for many households, with large clean up parties in vicinity of the lake being organised. It is unclear whether there is payment for services or whether this contributes to an individuals obligations within the Ethiopian State.
Woredas	Woredas are a unit of governance that can be affected by impacts of plastic litter, including increased costs due to clean-up or damage to infrastructure.	Primary	Local	Land system	Rural	Moderate	Weak		Relieving or reducing the impact of the flow on this stakeholder is a key indicator of successful interventions. Sanitation services are often unavailable many Woredas, but there may occasional costs associated with litter clean-up or impacts on woreda infrastructure.
Kebeles	Kebeles are the smallest unit of governance found in both urban and rural areas. Urban kebeles that can be affected by impacts of plastic litter, including increased costs due to clean-up, impact on their service provision, or damage to infrastructure.	Primary	Local	Land system	Urban	Moderate	Weak		Relieving or reducing the impact of the flow on this stakeholder is a key indicator of successful interventions. Sanitation services are sometimes provided through kebeles, depending on agreements with the urban authority, therefore they may costs associated with impacts on urban infrastructure managed locally.
Urban communities (incl. Fish consumption)	Local communities can be affected by plastic litter in several different ways. In terms of Hawassa, the impacts on local fisheries, increased costs associated with service provision, and the role of plastic litter in exacerbating urban flooding are important impacts to consider.	Primary	Local	Land system	Urban	Strong	Weak		Relieving or reducing the impact of the flow on this stakeholder is a key indicator of successful interventions, especially frequency/intensity of urban flooding events as well as ensuring that there is adequate protein in many households. Urban communities are both impacted by plastic litter, but are also a targeted stakeholder.
Tourism	Hawassa is a popular destination within Ethiopia, with close to 200000 visitors per annum. Visitors are attracted by the climate, lakeside locations, and reputation for being an attractive locale. Impacts from plastic litter can impact on its attractiveness as a tourist destination.	Primary	Basin	Land system	Urban	Moderate	Weak		Hawassa has a good reputation for being an attractive tourism destination. The tourism industry should provide support for efforts to reduce plastic litter, and should look at internal activities. It is noted that tourist operations may also be a key source of some types of plastic litter. Better awareness of the connection between their reliance on an attractive destination and being a source needs to be highlighted.
Lakeside Communities	Many lakeside communities are dependent on the Lake Hawassa fishery as a significant source of income, including through local fish markets.	Primary	Basin	Freshwater system	Urban / Riparian	Moderate	Weak		Provide social backing for changes. Relieving or reducing the impact of the flow on this stakeholder is a key indicator of successful interventions in terms of improved fishery ecosystems or local employment in the tourist industry.

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Ecosystems	Plastic litter can have a widespread impact on ecosystems, especially freshwater and marine types. Various types and sizes of plastic can have impact throughout the ecosystems and associated food chains.	Primary	Basin	Freshwater system	Lake	Strong	Weak		Highlight practices that have a reduced impact on ecosystems, and ensure public awareness about the impacts on this stakeholder.
Waste Collectors and Transporters	A number of sanitation activities are subcontracted to local operators. Many use poor quality municipal solid waste transportation and disposal approaches, mainly donkey carts.	Target	Local	Land system	Urban	Moderate	Moderate		Upgrades services/equipment to ensure that leakage from this part of the process is limited. While this group would generally support improved solid waste management, due to direct connection with livelihoods there may be some concerns about upstream policy changes around plastic that result in reduced flows of high value plastic.
Business (Local Industrial)	This includes businesses engaged in the manufacture and sale of household and commercial (durable) plastic products.	Target	Municipal	Land system	Urban	Weak	Moderate		Ensure that any waste generated through the production phase is adequately managed, with a focus on re-use if possible. Evaluate opportunities for building local production chains using plastic materials sourced in the sub-basin for further use within the sub-basin. Investigate options for using higher quality plastics.
Business (Industrial) Sectors	This category of stakeholder is very broad and can be separated into several categories but includes businesses engaged in other industrial activities that generate plastic waste (e.g. polystyrene foam, polyethylene plastic films, plastic cones, etc.); these include textile and garment factories operating in the Hawassa Industrial Park and other factories.	Target	Municipal	Land system	Urban	Moderate	Strong		Create opportunities to reduce plastic leakage through product re-design, preferences for alternative techniques, shift to higher quality and multiple use plastics, and ensure adequate waste disposal within industrial stakeholders.
Business (Commercial) Sectors	This category of stakeholder is very broad and can be separated into several categories. This group includes businesses engaged in the production, distribution and sale of bottled water, bottled beverages, and other plastic products or use plastic bags (factories, hotels, restaurants, supermarkets, shops, & kiosks).	Target	State	Land system	Urban	Weak	Moderate		Create opportunities to reduce plastic leakage through product re-design, shift to higher quality and multiple use plastics, and alternative materials/water distribution options. This stakeholder group may be very resistant to change due to the direct connections with livelihoods.
Health Sectors	The health sector can be a considerable source of plastic litter through the inappropriate disposal of medical waste, which may contain large proportions of plastic material. A large regional hospital is situated close to Lake Hawassa, and may be a source of plastic litter into the lake.	Target	National	Land system	Urban	Weak	Moderate		Look at opportunities to reduce plastic waste inhouse and/or ensure that solid waste management meets national standards and obligations.
Industries	Industries can contribute to the plastic litter issue in several ways, including through the reliance on poor quality plastic that is unable to be recycled, the inadequate disposal of plastic packaging, leakage from industrial sites, and the lack of support for alternatives.	Target	Basin	Land system	Urban	Weak	Strong		Look at opportunities to reduce plastic waste inhouse and/or ensure that solid waste management meets national standards and obligations. Increase opportunities to use higher standards of plastic that is more recyclable.
Market	Local markets inadequately dispose of solid waste, or their solid waste is very high in organic matters, meaning that disposal is complex or difficult.	Target	Local	Land system	Urban / Rural	Weak	Weak		Look at opportunities to reduce plastic waste inhouse and/or ensure that solid waste management meets national standards and obligations. Of specific note are those markets whose food waste flows supply urban dairy operations in many families. Plastic may enter the food chain if not
Government Sectors (Bottles)	Local and regional governments ongoing reliance on plastic bottles within their administration was specifically raised by participants.	Target	State	Land system	Urban	Moderate	Moderate		Look at opportunities to shift water supply options within government offices, from bottled supplies to larger container based versions or glass versions. Plastic bottles (PET) form the basis of the local recycling industry, and a source of income for many households, and alternative sources of income need to be considered.

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Business (Commercial) Sectors	Business sectors can exacerbate the use of plastic litter through distribution of products using plastic as packaging or packaging used to protect their products.	Target	Basin	Land system	Urban	Weak	Strong		Look at opportunities to reduce plastic waste sourced from inbound packaging and products that are outbound. Ensure that solid waste management meets national standards and obligations. Increase opportunities to use higher standards of plastic that is more recyclable or alternative forms of packaging. The HIP should continue to provide leadership on this issue.
Hotels	Hawassa is a popular destination with many hotels located in the urban area, and many close to Lake Hawassa itself. Inadequate disposal of plastic litter, including plastic bottles, is a concern raised on a regular basis.	Target	Municipal	Land system	Urban / Riparian	Moderate	Moderate		Plastic bottles (PET) form the basis of the local recycling industry, and a source of income for many households, and alternative sources of income need to be considered. Look at opportunities to reduce plastic waste sourced from inbound packaging, with particular reference to plastic bottles. Ensure that solid waste management processes meets national standards and obligations. Increase opportunities to use higher standards of plastic that is more recyclable or alternative forms of packaging.
Wedding Events / Event Organizers	Weddings and other celebrations, whether organised privately or through hotels, involve significant amounts of solid waste. Many of these events are carried out in particular seasons, and puts pressure onto limited solid water management infrastructure in Hawassa.	Target	Local	Land system	Urban / Riparian	Weak	Weak		Look at opportunities to reduce plastic waste during event catering, with particular reference to plastic bottles. Ensure that solid waste management processes following events meets national standards and obligations. Increase opportunities to use higher standards of plastic that is more recyclable or alternative forms of packaging or equipment during the event.
Hawassa City Administration	HCA is mandated to provide solid waste management services, but inadequate provision or a lack of control over leakage during collection can result in plastic litter being conveyed into Lake Hawassa or allowing plastic litter to collect in and clog urban drainage, leading to urban flooding.	Target	Municipal	Land system	Urban	Moderate	Moderate		Ensuring that the provision of sanitation services is an important role of this stakeholder. Increasing access and opportunities for communities to practice property disposal, increase internal awareness on the need to provide appropriate services and prioritise accordingly. This includes collection services.
Customers /Consumers	Consumers may not dispose of plastic litter appropriately, even when a service is available. Consumer habits, and the preference for packaged goods, continues to drive the use of plastic products.	Target	Global	Land system	All	Weak	Weak		Consumer preferences are a strong driver for the use of plastic materials, with cost and convenience being major factors. Overall, a change in behaviour and preference for alternatives must be fostered. Changes may be driven by public awareness, options for alternative packaging, and changes made by the producer.
Health Ministry and Centres	The Ministry of Health has some public health responsibilities in regard to solid waste management, as well as managing its own processes to both provide an example and ensure that it is not contributing to local health crisis.	Enabling	National	Land system	Urban	Moderate	Weak		Enable stronger involvement in public awareness campaigns and provide guidelines on waste disposal for medical and health centres.
Environmental Protection Authority	The EPA holds responsibilities in regard to environmental impact assessment, environmental protection, climate change, and monitoring the efforts of other agencies.	Enabling	State	Land system	Urban / Rural	Moderate	Strong		The EPA should work more with urban authorities to reduce the leakage of plastic litter into the environment. This could involve supporting the use of transfer stations, monitoring leakage in the collection process, and providing an enabling atmosphere for others to be involved in solid waste management.

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Ministry of Environment, Forest and Climate Change Commission (ECCC)	This Ministry has been granted a strong mandate in formulating and overseeing environmental policies, regulations and guidelines. In terms of plastic litter, this includes the administration of national proclamations for environmental pollution, environmental impact assessment, solid waste management, and other activities that have an impact on the management of solid waste in <u>land and waters</u> .	Enabling	National	Multiple	Urban / Lake	Weak	Moderate		Provide support for plastic waste reduction activities at a national level, including through policies, resources and capacity building.
City Administration	The city administration is the main provider of solid waste management services and, through these activities, can enable the safe disposal of solid waste including plastic litter. Any changes to the national legislative framework will be administered through the <u>urban authority</u> . Solid waste management is often a significant cost for <u>urban authorities</u> .	Enabling	Municipal	Land system	Urban	Moderate	Moderate		The City Administration should take more steps to reduce the leakage of plastic litter, including the upgrade of collection services, development of waste transfer stations, and fostering opportunities for jobs and employment in the sector. It is also noted that some of the responsibilities between different departments are unclear and there may need to be more streamlining.
City Sub-administration: Urban Planning Sanitation and Beautification	This stakeholder administers multiple aspects relating to solid waste management, including solid waste management, collection, and clean-up activities; and disaster management (flooding during the heavy rains).	Enabling	Municipal	Land system	Urban	Strong	Moderate		Provide support for plastic waste reduction activities at a local level, including through resources and capacity building, with a focus on solid waste management activities and investment into services. Also has an important role in enhancing public awareness <u>on the issue</u> .
Agri-Sectors	Agriculture is a significant land use in Hawassa, and there is growing investment into higher land use intensity through increased irrigation, fertilisers, and other packaging. It is unclear how much involvement that the Agricultural Bureaus have in ensuring that plastic litter is disposed of appropriately, or <u>reduced in frequency of use</u> .	Enabling	Basin	Land system	Rural	Weak	Moderate		
RVLBO	As well as the Basin Development Authority hosted at the Federal level, there are local offices working in different basins across Ethiopia. The RVLBDO has an important role in coordinating different interventions on plastic litter flow that affects the Lake Hawassa, as well as a mandate to manage riparian locations.	Enabling	Basin	Freshwater system	Urban / rural	Moderate	Moderate		Provide support for local activities, either directly or through strategic planning undertaken as part of the present Basin Plan process. The RVLBDO may have a some impact on the management of plastic litter through its coordination and IWRM functions, as well as strategic planning through the Basin Plans, but it may be less influential than other local institutions in <u>regards to the solid waste sector</u> .
Environmental Officers (Regional Bureaus)	Administer plans, policies, and regulations of various tiers of governance.	Enabling	State	Land system	Urban / Rural	Moderate	Moderate		Ensure a higher priority for administering solid waste provisions. Whilst environmental officers are more accurately a sub-component of the Regional State or Urban Authority administrations, they may have a greater or lesser interest in a topic that their respective institutions. Similarly, there may be <u>peer groups for exchanging information</u> .
Ministry of Water Irrigation and Energy	This Ministry is responsible for water resource management, especially in terms of planning and strategy. It also hosts the Basin Development Authority that is enacted under the River Basin Councils Proclamation. The mandate within the BDA is related to coordination and strategic planning around IWRM, but it unclear how involved it is within solid waste management activities.	Enabling	National	Freshwater system	Urban / Lake	Weak	Moderate		Provide support for plastic waste reduction activities at a national level, including through policies, resources and capacity building, with a focus on implementing IWRM.

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Ministry of Health	The Ministry of Health, and local counterparts, plays a role in governance of solid waste, predominantly from a health perspective. Health facilities were noted as key sources of plastic litter in the Basin, including inadequate management of medical waste and packaging. The presence of a regional hospital in Hawassa, close to Lake Hawassa, is seen as a concern by local institutions. The appropriate disposal of medical waste can be resource-intensive, and it is unclear how well this is <u>integrated into wider solid waste</u>	Enabling	National	Land system	Urban	Weak	Moderate		Provide support for plastic waste reduction activities at a national level, including through policies, resources and capacity building, with a focus on health impacts. Ensure that health centres undertake appropriate waste management, especially in terms of medical waste.
Ministry of Agriculture	This Ministry supports the preparation and administration of policies, proclamations and regulations relating to agriculture and rural development at a national level. It is unclear as to whether plastic litter in rural areas is given a high priority within its operations, but given that workshop participants identified plastic litter sources in the rural <u>environment, there may be a gap.</u>	Enabling	National	Land system	Rural	Weak	Moderate		Provide support for plastic waste reduction activities to be carried out in rural areas, including through policies, resources and capacity building.
Ministry of Industry	The Ministry of Trade and Industry is responsible for facilitating investment across Ethiopia. Amongst their duties they are promoting the expansion of domestic trade and take appropriate measures to maintain lawful trade practices. They also control the compliance of goods and services with the requirements of mandatory Ethiopia standards and take measure against those found to be below the standards <u>set for them: which may be important for</u>	Enabling	National	Land system	Urban	Moderate	Strong		Provide support for plastic waste reduction activities at a national level, including through policies, resources and capacity building, with a focus on industrial activities and investment.
Ministry of Urban Development and Construction	The responsibilities of this Ministry are to design, approve, and implement policies, strategies and programs relating to urban development. Through its influence over urban policy and planning, it has an impact on the way that solid waste is planned and managed and should provide support for ensuring that <u>services, such as solid waste</u>	Enabling	National	Land system	Urban	Moderate	Moderate		Provide support for plastic waste reduction activities at a national level, including through policies, resources and capacity building. However, this should also include stronger local activities due to the presence of Hawassa Industrial Park.
Ministry of Culture and Tourism	This Ministry is responsible for the promotion of tourism across Ethiopia and provisions around accommodation and services around tourism. Some types of plastic litter are mainly sourced from tourist related activities, and this Ministry should be coordinated within wider solid waste management activities <u>in the sub-basin.</u>	Enabling	National	Multiple	Urban/Lake	Moderate	Moderate		Provide support for plastic waste reduction activities at a national level, including through policies, resources and capacity building, with a health focus. Ensure that appropriate measures for medical waste disposal is undertaken correctly by local health centres.
Hawassa University	Provides knowledge and experience on addressing solid waste management, as well as the capacity to build public awareness amongst students. It is also a significant local employer that may have significant waste management needs.	Supporting	National	Land system	Urban / Rural	Moderate	Weak		Provide local leadership on solid waste management, including through reduced inhouse plastic bottle use, improved opportunities for students and staff to access water on campus through alternate means, and create further public awareness within staff and students.

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CIFA (Community Initiatives Facilitation and Assistance)	CIFA is a specific international NGO that already operates in Hawassa, and has provided support for improved solid waste management. They have been supporting the Hawassa Wubet Waste Disposal and Recycling Association since January 2018. They supported this association through capital support from which the recycling association could build a shed and sorting/storage facility.	Supporting	Local	Land system	Urban	Moderate	Moderate		Continue to operate in the Hawassa sub-basin, and help catalyse further action through the partnerships that it has formed.
UN Agencies	Various UN agencies operate in Hawassa, especially UNDP. As global entities, a number of different agencies could be more strongly involved in addressing solid waste management issue, including UNIDO and UNDP.	Supporting	Global	Land system	Urban / Rural	Moderate	Moderate		Provide support for local activities, either directly or through blended programmes.
Recycling artists.	In recent years, there has been growing global interest in upcycling where materials are re-purposed into art works and other structures. Such activities could provide an opportunity to create value in some types of plastic products or, at the minimum, increase public	Supporting	Local	Land system	Urban	Strong	Weak		Provide support for local artist activities
CBO (Central Business Organizations)	Local association of businesses located in central Hawassa. Provides services and advocacy with government on behalf of members, as well as being a means to channel information to its members.	Supporting	Municipal	Land system	Urban	Moderate	Moderate		Advocates for improved solid waste management and create awareness amongst members.
Recyclers – Circular Economy (Internal)	Provides local recycling services, including conventional as well as activities through the informal sector	Supporting	Local	Land system	Urban	Strong	Weak		
GIZ IWaSP	This is an ongoing multi-stakeholder partnership. Among other activities, it organises partnership building and solid waste management workshops, as well as advocacy	Supporting	Basin	Freshwater system	Urban / Lake	Strong	Weak		Provide support and advocates for plastic waste reduction at a local level, including through resources, partnerships, and capacity building. It also has an important role in enhancing public awareness on the issue.
The World Bank	The World Bank has made several investments into sanitation activities in Hawassa in recent years. Ongoing programmes are the Urban Productive Safety Net Project (UPSNP) and the Urban Institution and Infrastructure Development Project (UIIDP). Through UPSNP, up to 60,000 people are regularly mobilised in Hawassa for urban improvement and clean-up campaigns. The UIIDP supports financing of various infrastructures such as skip loaders, a sanitary landfill site, compactors, public toilets, storm water drains and artificial wetland systems.	Supporting	Global	Land system	Urban	Strong	Moderate		Continue to provide support, resources and capacity for sanitation activities in Hawassa, including the ongoing administration and use of UPSNP and UIIDP. Through these programmes, it also has an important role in enhancing public awareness on the issue.
USAID	This international institution supports a range of development activities, including within the Hawassa sub-basin.	Supporting	Global	Land system	Urban / Rural	Moderate	Moderate		Provide support for solid waste management activities in Hawassa, including resources and capacity building.
UN Habitat	Various UN agencies operate in Hawassa, especially UNDP. As global entities, a number of different agencies could be more strongly involved in addressing solid waste management issue, including UNIDO and UNDP. This stakeholder supports a range of development activities, including within the Hawassa sub-basin.	Supporting	Global	Land system	Urban / Rural	Strong	Moderate		Provide support for local activities, either directly or through blended programme, with a particular focus on urban planning and transitions to sustainable waste services.
SOS-Sahel	This international institution supports a range of development activities, including within the Hawassa sub-basin and is a member of IWaSP.	Supporting	Global	Land system	Urban / Rural	Moderate	Moderate		Provide support for solid waste management activities in Hawassa, including resources and capacity building.

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GIZ	This international institution supports a range of development activities, including within the Hawassa sub-basin and is a member of IWaSP	Supporting	Global	Land system	Urban	Strong	Moderate		Provide support for solid waste management activities in Hawassa, including resources and capacity building.
Irish Aid	This international institution supports a range of development activities, including within the Hawassa sub-basin and is a member of IWaSP.	Supporting	Global	Land system	Urban / Rural	Moderate	Moderate		Provide support for solid waste management activities in Hawassa, including resources and capacity building.
DFID	This international institution supports a range of development activities and investments, including within the Hawassa sub-basin.	Supporting	Global	Land system	Urban / Rural	Moderate	Moderate		Provide support for solid waste management activities in Hawassa, including resources and capacity building.
Ethiopian Tourism Organization	This national organisation supports the expansion and improvement of tourism opportunities across Ethiopia. Tourism as a product is dependent on locations that are attractive, and solid waste may impair the quality of the product.	External	National	Multiple	Urban / Rural / Lake	Weak	Moderate		Build awareness amongst members of the plastic litter issue and the risks that it poses to their industry, and take steps to build sector-wide positions on addressing solid waste.
Ethiopian Tour Operators Association	This national organisation supports the expansion and improvement of tourism opportunities across Ethiopia, with a focus on supporting tour operators. Whilst Hawassa is a destination itself, it also is an important launching pad for tours that explore southern parts of Ethiopia. Such tours may put pressure on local solid waste operations, whether in Hawassa or within sites located as part of tour itineraries.	External	National	Multiple	Urban / Rural / Lake	Weak	Moderate		Build awareness amongst members of the plastic litter issue and the risks that it poses to their industry, and take steps to build sector-wide positions on addressing solid waste, with a particular interest in reducing impacts from their tours in Hawassa and southern Ethiopia.