



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA



Integrated Waste Management Plan

USER'S MANUAL

October 2012

Online Toolkit for the development of an Integrated Waste Management Plan

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PURPOSE OF THE ONLINE TOOLKIT

The online toolkit was developed to assist municipalities in developing their own Integrated Waste Management Plan (IWMP) documents.

The toolkit must be used in conjunction with the **guideline document** that provides detailed information and examples on how to develop an IWMP as well as where and how to collect the required data.

The toolkit consists of **interactive data forms** that must be completed by a municipality. Information about their demographic population and waste are examples of the type of information that will be included.

Once the forms have been filled in, the system will create a **customized MS Word template** containing an outline for the IWMP document to be developed. The template will contain the situation analysis data provided by the municipality in table and graph format.

The municipality can edit and adjust the MS Word template and finalize it for submission.

To access the online toolkit:

<http://toolkit.sawic.org.za/>

To access the online guideline and other supporting documentation:

<http://iwmp.sawic.org.za>

HOW TO GET STARTED

1. Register as a new user

- a. Provide an email address
- b. Provide a unique password
- c. Retype the password
- d. Click the "Register" button

Welcome to the IWMP online toolkit!

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The user manual for this toolkit can be downloaded [here](#).

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Register

Email address **a**

Password **b**

Confirm password **c**

Register **d**

Login

Email address

Password

Province
--Select--

Municipality
--Select--

Login

2. Login as a user

- a. Provide the email address you registered with
- b. Provide your unique password
- c. Select your province
- d. Select your municipality
- e. Click the "Login" button

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Email address

Password

Confirm password

Register

Login

Email address **a**

Password **b**

Province **c**
--Select--

Municipality **d**
--Select--

Login **e**

COMPONENTS OF THE TOOLKIT

The screenshot shows the 'Situation analysis Template for Tsolwana Local Municipality' page. It features a light blue information box at the top, a main heading, and a section titled '1. Demographics (Population and development profiles)'. Under this section, there are three rows of data input fields with 'Calculate this value' buttons. A sidebar on the right contains 'Guideline links' and 'User options'. Five callout boxes with arrows point to these elements: '1 Information box with instructions' points to the top information box; '2 Section headings' points to the main section heading; '3 Descriptions of data required' points to the text labels of the input fields; '4 Text boxes to add data' points to the input fields themselves; and '5 Guideline links' points to the sidebar menu.

1 Information box

The light blue box at the top of the page gives **short instructions** and helpful information on some of the pages.

2 Section headings

Each page represents a different section of the toolkit that must be completed. The section headings **indicate the information** that is required to complete that specific page.

3 Descriptions of data required

Each section requires specific data to be provided. The descriptions on the left of each page, **describes the information is required** for that specific text box.

4 Text boxes

To the right of each description is an **empty text box** that must be filled in with the data requested. For example, if the description reads *Current growth estimates per annum* under the section heading *Population growth for a High income, low density settlement type*, you must type this value in the text box to the right of this description.

5 Guideline links

Guideline links are located **on the right** in the sidebar menu of each page. These links provide more information and guidelines about what data is required and where to collect it.

These guidelines have been developed to follow the waste handling process in accordance with the **waste management hierarchy**. This implies that waste management officials should include all aspects of the waste management hierarchy in their planning efforts.

These guidelines provide a **background for the compilation** of the Integrated Waste Management Plan (IWMP). It also includes a short historical overview of IWMP's to date and a basic description of the legal framework pertaining to IWMP's.

PROVIDING DATA

You're now ready to start **completing the interactive data forms** with information about your municipality.

There are **7 sections** to be completed:

1. Demographics (Population and development profiles)
 - 1.1 Growth estimates per annum
 - 1.2 Demographic profile per settlement type
2. Domestic Waste generation per settlement type
3. Waste quantities and types
4. Waste recycling, treatment and disposal
5. Collection Services per settlement type
6. Budget
7. Revenue sources

Some of these sections will now be explained as examples.

Section 1: Demographics (Population and development profiles)

The screenshot shows the 'Situation analysis Template for Ikwezi Local Municipality' with a focus on the '1. Demographics (Population and development profiles)' section. Under '1.1 Growth estimates per annum', there are four rows of input fields for different settlement types: 'High income, low density settlement', 'Middle income, middle density settlement', 'Low Income, High Density (including Informal Settlements)', and 'Rural Settlements'. Each row has a text box containing '0' and a 'Calculate this value' link. A blue callout box with an arrow points to the text boxes, stating 'Text boxes to be completed'. Another blue callout box with an arrow points to the 'Calculate this value' link, stating 'Calculate this value'. On the right side, there is a 'Guideline links' menu with options: 'Demographics (population and development profiles)', 'User options', 'Edit pages', 'View submissions', and 'Logout'.

In this section you must provide demographic related information for each settlement type in your municipality. If you have the growth estimate percentage per year **readily available** for each settlement type, you can enter it into the text boxes provided.

If you would like to calculate this percentage, then click the “**Calculate this value**” link on the right hand side of each text box. When you click on the “**Calculate this value**” link, a new window will open where you need to provide **ALL** the values in the text boxes.

The screenshot shows a pop-up window titled 'Calculating the Growth Estimate per annum for High income, low density settlement'. It contains several input fields: 'Base resident population' (with '0' entered), 'Births to resident', 'Deaths to residents', 'Immigrants', 'Emigrants', and 'Number of years' (with '0' entered). A 'Calculate' button is at the bottom left, and a 'Close' button is at the bottom right. A blue callout box with an arrow points to the input fields, stating 'Provide values for each of these boxes'.

Clicking on the **“Calculate”** button will calculate the growth estimate per annum percentage based on the values that you provided.

This calculated value will override any value that you might have added into the text box before the calculation. This value can however be changed at any time.

Once all the values that you have available have been entered into the text boxes click on the **“Save and continue”** button.

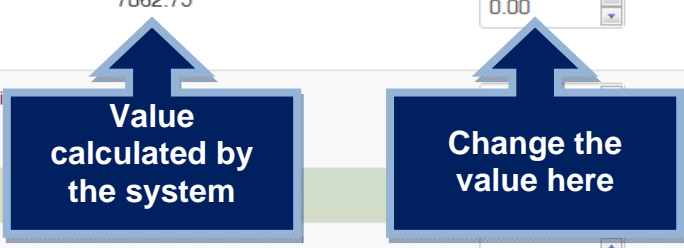
The screenshot shows a form titled "Population distribution" with four sections: "Age", "Gender", "Education", and "Employment". Each section contains two input fields with up/down arrows. The "Age" section has "Youth", "Middle age", and "Old age" (though only two are visible). The "Gender" section has "Male" and "Female". The "Education" section has "Primary", "Secondary", and "Tertiary" (though only two are visible). The "Employment" section has "Employed" and "Unemployed". A blue callout box with a downward arrow points to the "Save and continue" button, which is located at the bottom right of the form, next to a "Cancel" button.

After saving, the **next section** in the process will be loaded for completion.

Section 2: Domestic Waste generation per settlement type

2. Domestic Waste generation per settlement type

High income, low density settlement	
Current domestic waste generation rates per capita:	7062.75 <input type="text" value="0.00"/>
Future domestic waste generation rates per capita (in 10 years):	<input type="text" value="0.00"/>
Middle income, middle density settlement	
Current domestic waste generation rates per capita:	<input type="text" value="0.00"/>
Future domestic waste generation rates per capita (in 10 years):	<input type="text" value="0.00"/>



If you have provided enough data in the first section, the system will **automatically calculate** the values for you and display it next to each description. If you would like to **change these values**, type in the correct value in the text box on the right.

Section 3: Waste quantities and types

3 Waste quantities and types

Landfill/Area details
Name
Data collection method

Waste generated per annum (tons) per waste type
Organic waste (tons)
Cans (tons)
Paper (tons)
Glass (tons)
Plastic (tons)
Construction and demolition waste (tons)
Tyres (tons)
Other waste type
Other (tons)

In this section, waste quantities and types for **every landfill or area** in your municipality must be provided.

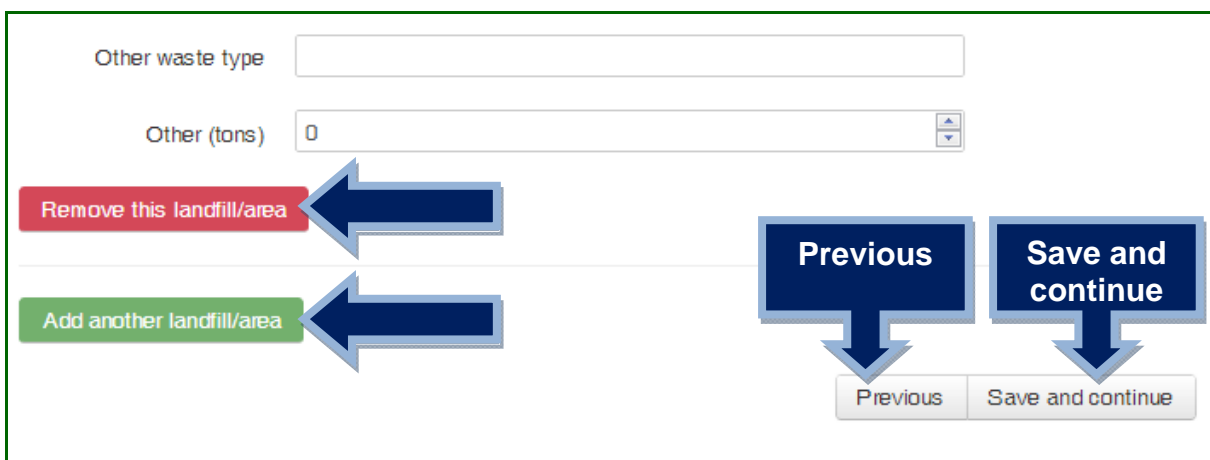
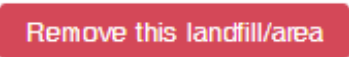
By default, there is **one empty form visible** that can be completed immediately with information about one of your landfills or areas.

If the waste type your landfill or area processes **is not in the list provided**, type the name of the waste type in the text box labeled “**Other waste type**”. Add the tons generated per annum for this waste type in the next text box labeled “**Other (tons)**”.

Once this default form has been completed, click on the green **“Add another landfill/area”** button at the bottom of the page to get a new empty form to complete with data for another landfill or area.



To undo this and to **remove the new form** that was created, click the red **“Remove this landfill/area”** button located after the form itself.



When all your landfills and areas have been added, click on the **“Save and continue”** button.

To go back to the previous section, click the **“Previous”** button.

Section 4: Waste recycling, treatment and disposal

4. Waste recycling, treatment and disposal

Select facility type to add:

- Select-
- Waste Disposal Facility
- Treatment Facility
- Recycler
- Other

Select facility type to add

In this section capacity information must be provided for **every Waste Disposal Facility, Treatment Facility and Recycler** in your municipality.

Start by selecting the **type of facility** you want to add data for. There are 4 options:

- Waste Disposal Facility
- Treatment Facility
- Recycler
- Other

Once you've selected a facility type, click on the green **"Add facility"** button.

Add facility

An **empty form** will now be available to complete with details about a facility.

To undo this and to **remove the empty form** that was created, click the red **"Remove facility"** button located after the form itself.

Remove facility

To **add another facility**, select a new type and click on the **"Add facility"** button again. Repeat this until all your facilities have been added.

4. Waste recycling, treatment and disposal

Select facility type to add:

Waste Disposal Facility details

Name

Status

Total Capacity

Existing Capacity

Available Airspace

[Remove facility](#)

Empty form to be completed for every facility

[Previous](#) [Save and continue](#)

Section 6: Budget

6. Budget

Collection

Transportation:	R	0.00
Capex-purchase (vehicles):	R	0.00
Maintenance:	R	0.00
Fuel:	R	0.00
Receptacles:	R	0.00
General:	R	0.00
Recyclables:	R	0.00

Other

Add other

Subtotal: R 0

In this section **budget allocation amounts** for all expenses impacting waste management must be added.

If an item you budget for is not in the list provided, click on the green **“Add other”** button. Provide a name and amount for the item as indicated below:

Other

Remove R 0.00

Add other

To undo this and to **remove the extra other box** that was created, click the red **“Remove”** button.

VERIFYING THE DATA

Once you have provided data for all 7 sections, you will see the **Verify results** page shown below:

Click on the tabs to review the data for each section

Verify results

1. Demographics 2. Domestic Waste generation per settlement type 3. Waste quantities and types
4. Waste recycling, treatment and disposal 5. Collection Services per settlement type 6. Budget 7. Revenue sources

1. Demographics (Population and development profiles)

High income, low density settlement

Base population	125 000
Growth estimates per annum	0.25
Age	
Youth	10
Middle age	25
Secondary	0
Tertiary	0
Employment	
Employed	0
Unemployed	0

Data to be reviewed

Change the values in this page **Create template**

Change the values on this page Create template

There are 7 tabs at the top of for each of the sections that you have completed.

When you click on a tab it will show you that section with all the values you have added.

You can now review the data and make sure all the values are correct. If you would like to change a value, click on the **“Change the values on this page”** button.

This will take you back to the interactive form for this section and you will be able to change any of the values.

When you have reviewed all the sections and are ready to create your MS Word template, click the **“Create template”** button located at the bottom right of the page.

DOWNLOADING THE TEMPLATE

After clicking the “**Create template**” button, you will see the **Download** page shown below:

Created	Modified	Municipality	User email address	Actions
Wed, Oct 24th 2012, 08:47	Wed, Oct 24th 2012, 08:47	Setsoto Local Municipality	elsa707@gmail.com	Edit pages Download MS Word template

User options
[Edit pages](#)
[Download template](#)
[Logout](#)

Edit pages

Download MS Word template

To download the Microsoft Word template for your municipality, click on the “**Download MS Word template**” button.

SAVE THE DOCUMENT in a place where you know you can easily find it again.

File Download - Security Warning

Do you want to open or save this file?

Name: Mpumalanga_19_October_2012
Type: Microsoft Office Word Document
From: ra

[Open](#) [Save](#) [Cancel](#)

While files from the Internet can be useful, this file type can potentially harm your computer. If you do not trust the source, do not open or save this software. [What's the risk?](#)

Recent Documents

Save as...

If you would like to make changes to any of the sections, click the “**Edit pages**” button. This will take you back to the interactive form for this section and you will be able to change any of the values.

Once you have changed the values and reviewed them, a **NEW template** will be created.

THE MS WORD TEMPLATE

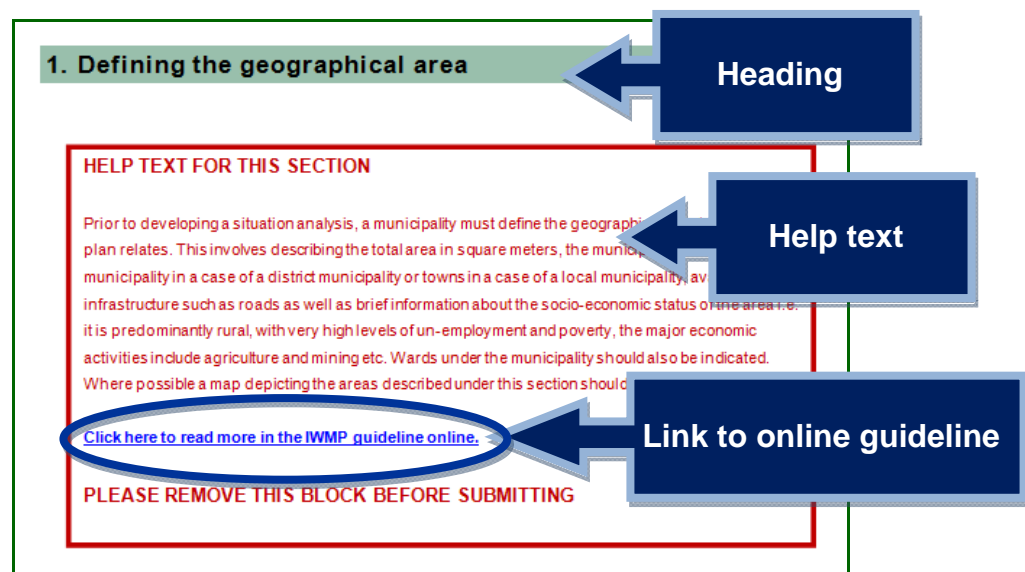
The MS Word template document that is generated by the system is a template that contains all the required headings of an IWMP and can now be **edited and completed for submission**. The headings are only a guide for you to know what information is required and what you must add under each.

These headings are described in the guideline and include:

1. Defining the geographical area
 2. Situation analysis
 3. Desired end state
 4. Identify, evaluate and select alternatives
 5. Communication and Stakeholder Participation
 6. Implementation Instruments
 7. Reporting on Monitoring
- Annexure or References (Optional)

Each of these headings have a red block with help text, taken from the guideline, to assist you in understanding what content you must add. Each block also contains a link to the **online guideline information**.

PLEASE remember to remove the red boxes before submitting your plan.



The **Situation Analysis** section of the template document shows all the data that you've provided in the 7 sections of the online toolkit.

The data provided is displayed in tables and also in graph format if sufficient data was provided.

For example, the first part of the Situation Analysis will show the demographic information that you have provided for each settlement type with relevant graphs:

2. Situation analysis

2.1. DEMOGRAPHICS (POPULATION AND DEVELOPMENT PROFILES)

2.1.1. High income, low density settlement

Population growth	
Base population	400.00
Current growth estimates per annum	0.60
Future population estimates	500.00
Population distribution	
Age:	
Youth	50
Middle age	20
Old age	30
Gender:	
Male	5
Female	10
Education:	
Primary	40
Secondary	30
Tertiary	20
Employment:	
Employed	
Unemployed	

Tables with data provided

Graphs based on the data in the table above

Population distribution graphs:

■ Youth ■ Middle age ■ Old age

Age Group	Population
Youth	50
Middle age	20
Old age	30

■ Male ■ Female

Gender	Population
Male	5
Female	10