

FLOOD & DROUGHT MANAGEMENT TOOLS



Water Safety Plan support application

Contacts:

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About the DataPortal

The Flood & Drought portal is developed as part of the Flood and Drought Management Tools project. For more information on the project please visit the project home page at: <http://fdmt.iwlearn.org/en>

The Flood & Drought portal provides access to a number of apps supporting decision makers at basin and local level. The aim is to support existing planning processes as TDA/SAP and IWRM at basin scale and Water Safety Planning at local scale through the technical apps. The apps could be used individually or in connection.

Please visit the user guide for more indepth information on the use of the apps and their intended support for the different stages within basin and local level planning.

Knowledge portal with discussion forum and upcoming online courses: Select the "Knowledge portal" in the ? menu or use the link - [KnowledgePortal](#)

For video tutorials and overview: [YouTube](#)

For technical exercises (pdf files) : [Dropbox](#)

For technical questions please contact:

[Oluf Jessen \(Project manager\)](#) or [Bertrand Richaud \(Water resources expert\)](#)



DATA AND INFORMATION

Access to near real-time data. Flood and drought indices. Climate forecast and climate change data.



DROUGHT ASSESSMENT

(Under development). Locate and identify hazards, estimate impacts and provide risk assessment.



FLOOD ASSESSMENT

(Under development). Locate and identify hazards, estimate impacts and provide risk assessment.



ISSUE ANALYSIS

Causal Chain analysis and WRIAM. Understand and prioritise the causes behind issues.



WATER INDICATOR

Identify water related indicators to support management and decision-making.



BASIN PLANNING

(Under development). Create and evaluate basin plans. Linkage to water resource model.



WATER SAFETY PLANNING

Support water safety planning



REPORTING

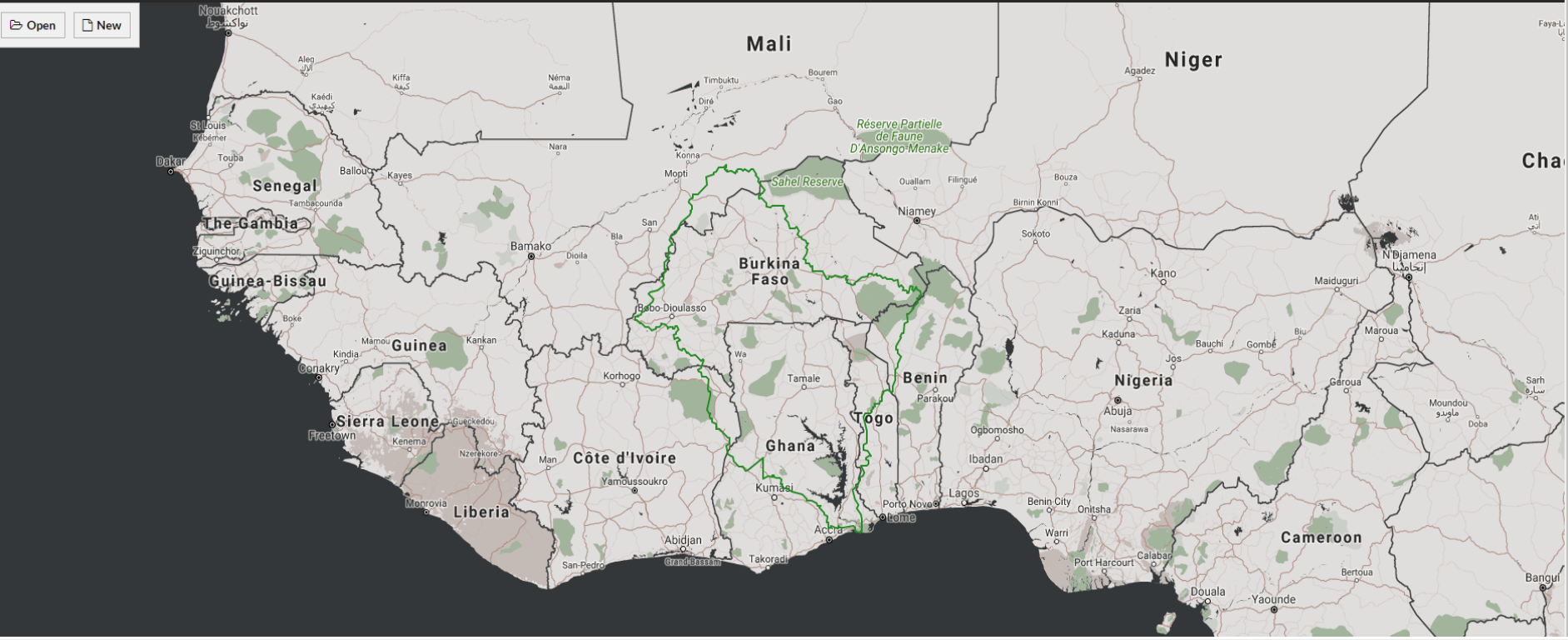
User configured templates providing linkage to overview reports or bulletins. Specific templates for TDA/SAP, IWRM and WSP.

Flood and Drought Portal

WATER SAFETY PLANNING

User: brenda Workgroup: Private Area: Volta

Open New



Flood and Drought Portal

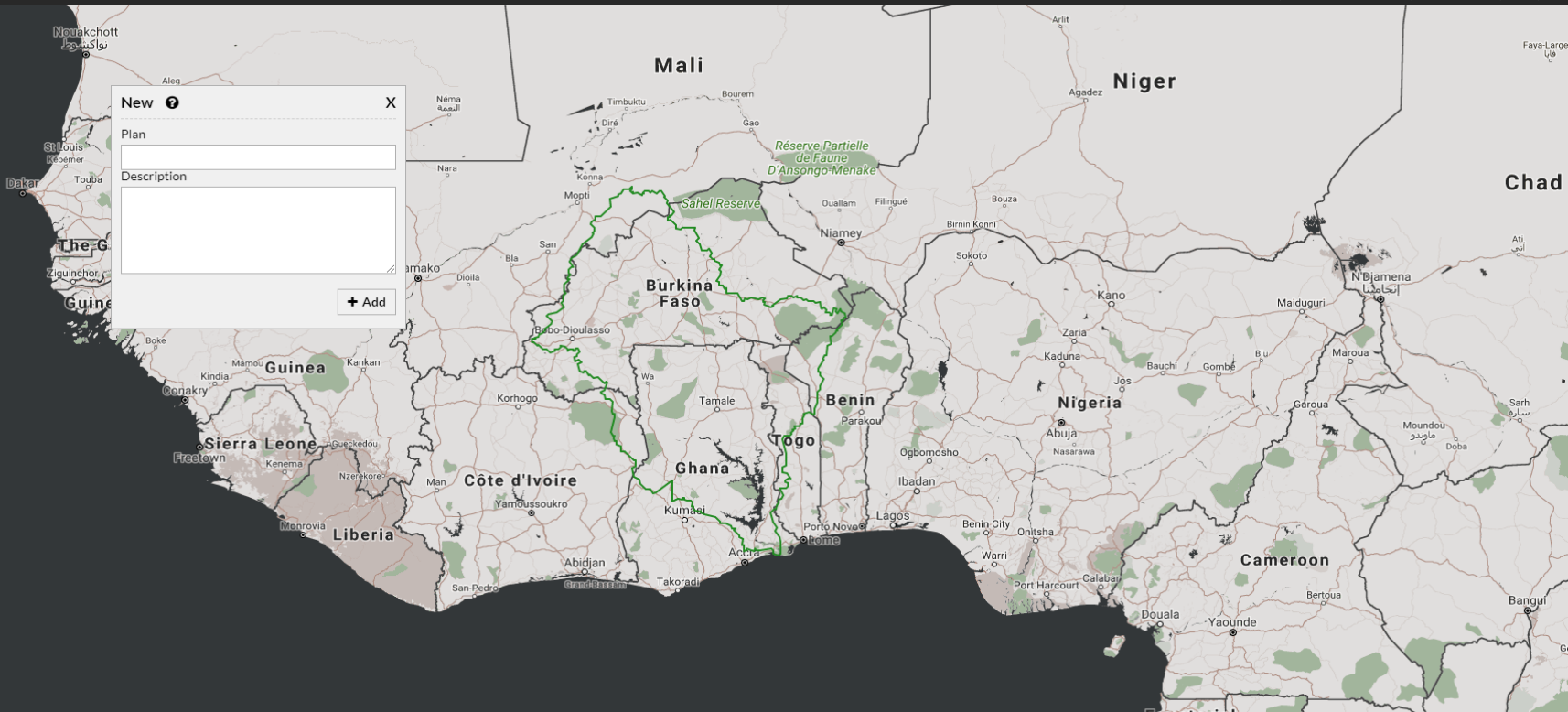
Open New

New X

Plan

Description

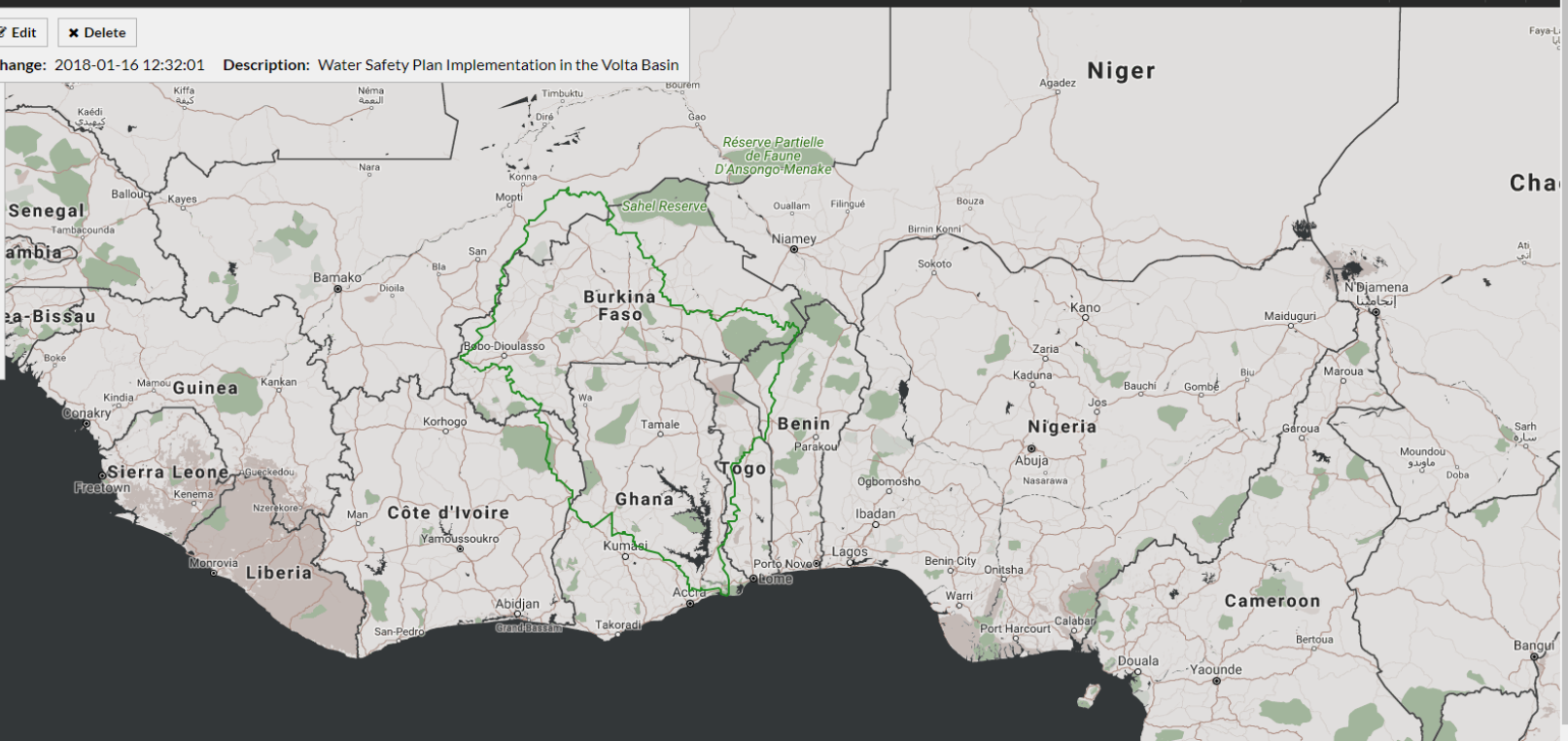
+ Add



Flood and Drought Portal

Plan: WSP-volta User: brenda Last change: 2018-01-16 12:32:01 Description: Water Safety Plan Implementation in the Volta Basin

- ▶ Module 1: The WSP team
- ▶ Module 2: Water supply system
- ▶ Module 3: Hazards and risks
- ▶ Module 4: Control measures
- ▶ Module 5: Improvement plan
- ▶ Module 6: Monitoring control measures
- ▶ Module 7: Verification of WSP
- ▶ Module 8: Management procedures
- ▶ Module 9: Supporting programmes
- ▶ Module 10: Periodic review of the WSP
- ▶ Module 11: Revision after an incident



Flood and Drought Portal

User: brenda Workgroup: Private Area: Volta ?

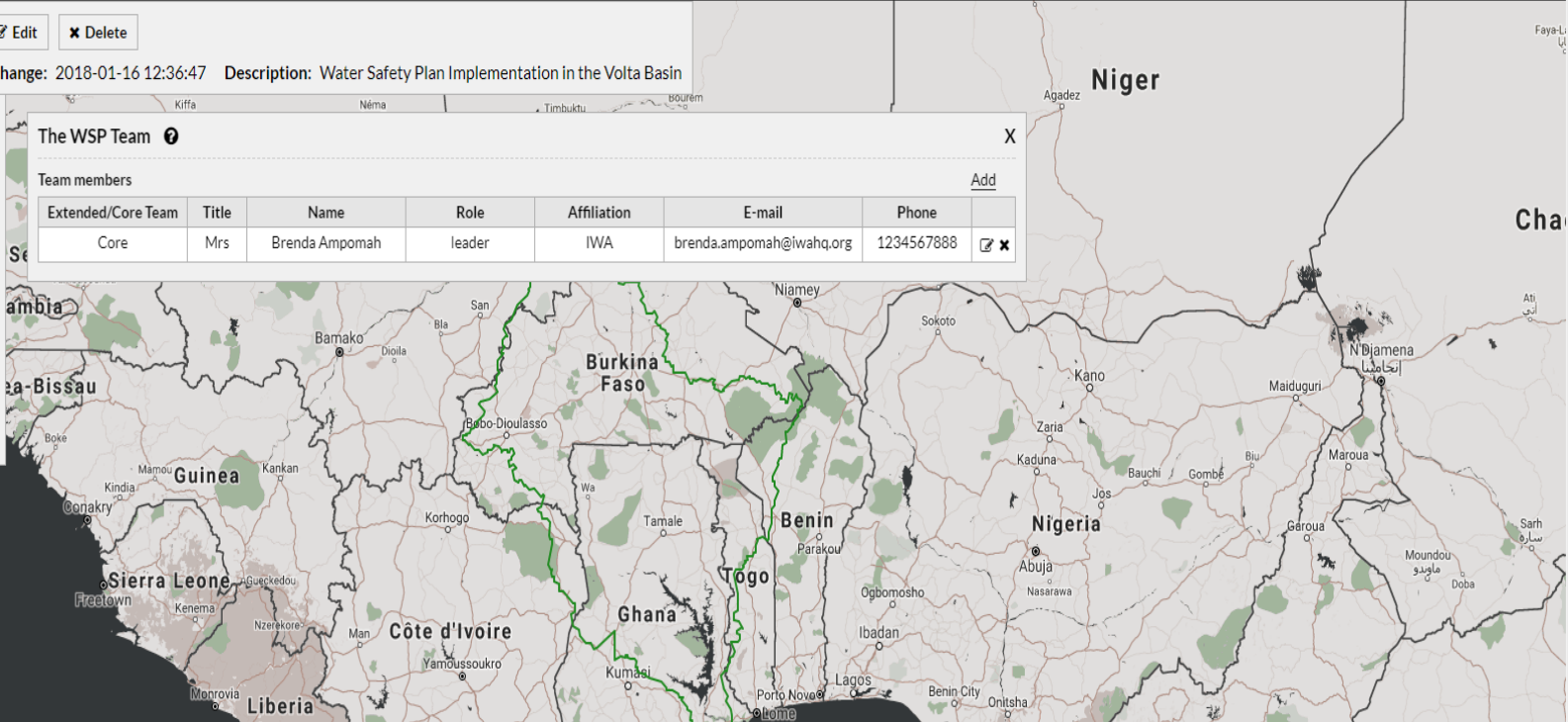
Plan: WSP-volta User: brenda Last change: 2018-01-16 12:36:47 Description: Water Safety Plan Implementation in the Volta Basin

- ▶ Module 1: The WSP team
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The WSP Team X

Team members [Add](#)

Extended/Core Team	Title	Name	Role	Affiliation	E-mail	Phone	
Core	Mrs	Brenda Ampomah	leader	IWA	brenda.ampomah@iwahq.org	1234567888	<input type="button" value="✎"/> <input type="button" value="✕"/>



Flood and Drought Portal

WATER SAFETY PLANNING

Plan: WSP-volta User: brenda Last change: 2018-02-02 14:08:17 Description: Water Safety Plan Implementation in the Volta Basin

- ▶ Module 1: The WSP team
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Level 1-Component X

Name

Area

Component type

Direct Control

Location (lon, lat) Click on map to select

Keep dialog open

Level 2-Process Steps X

[Add](#) [Move up](#) [Move down](#)

Level 2-Component X

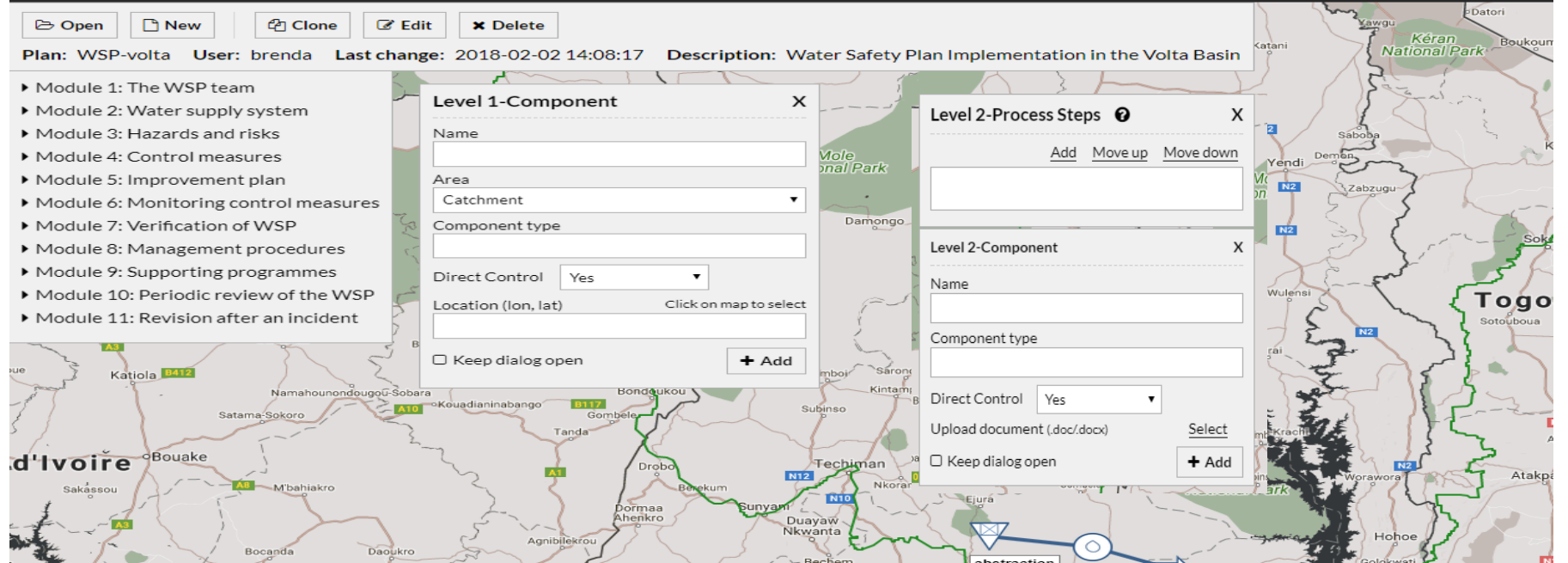
Name

Component type

Direct Control

Upload document (.doc/.docx)

Keep dialog open



Flood and Drought Portal

Open New Clone Edit Delete

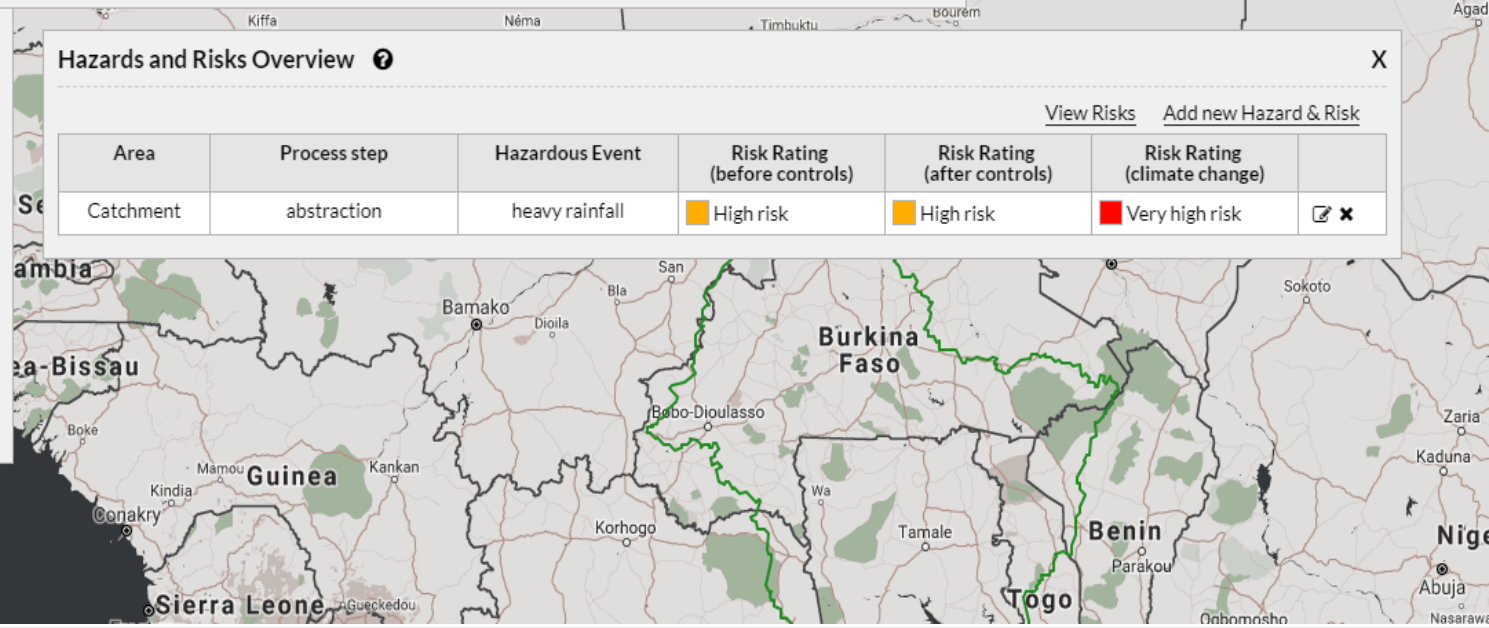
Plan: WSP-volta User: brenda Last change: 2018-01-16 13:05:23 Description: Water Safety Plan Implementation in the Volta Basin

- ▶ Module 1: The WSP team
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Hazards and Risks Overview X

[View Risks](#) [Add new Hazard & Risk](#)

Area	Process step	Hazardous Event	Risk Rating (before controls)	Risk Rating (after controls)	Risk Rating (climate change)	
Catchment	abstraction	heavy rainfall	High risk	High risk	Very high risk	✎ ✕



Process step: Catchment

Area: Catchment

Direct Control: Yes

Hazardous event: introduction of pesticides through farming long the banks

Hazard type: Chemical

Hazard and risks | Control measures | Improvement plan

Preliminary risk assessment with no control

	Current	Future (Climate change)
Likelihood	Possible	Very likely
Severity	Moderate	Major
Risk rating	Medium risk	Very high risk

Basis: toxic chemicals affecting water quality

Keep dialog open

Hazard and risks | **Control measures** | Improvement plan

Existing control measures

Existing Control measure: Catchment\Restricted access to catchments

Effectiveness(%): Yes

Note:

Re-assessment of risk (with existing Control measure)

	Current	Future (Climate change)
Likelihood	Unlikely	Possible
Severity	Minor	Major
Risk rating	Low risk	High risk

Basis:

Hazard and risks | **Control measures** | **Improvement plan**

Improvement Plans Add new Improvement plan

Action	Arising from	Details	Responsible	Due	Status	
continuous inspection	inadequate control of source protection	Brenda	brenda.ampomah@iwahq.org	20/02/2018	on going	 

Flood and Drought Portal

WATER SAFETY PLANNING

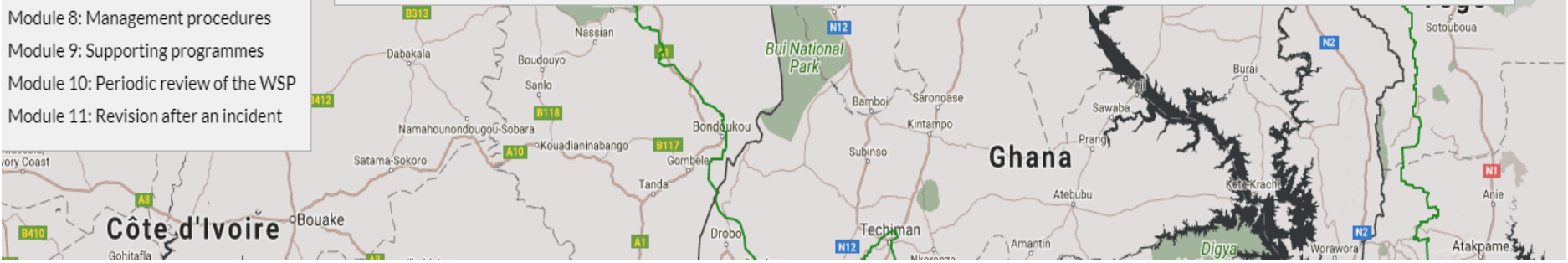
Open New Clone Edit Delete

Plan: WSP DEMONSTRATION User: brenda Last change: 2018-02-02 17:58:23 Description: VOLTA

- Module 1: The WSP team
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Monitoring of control measures

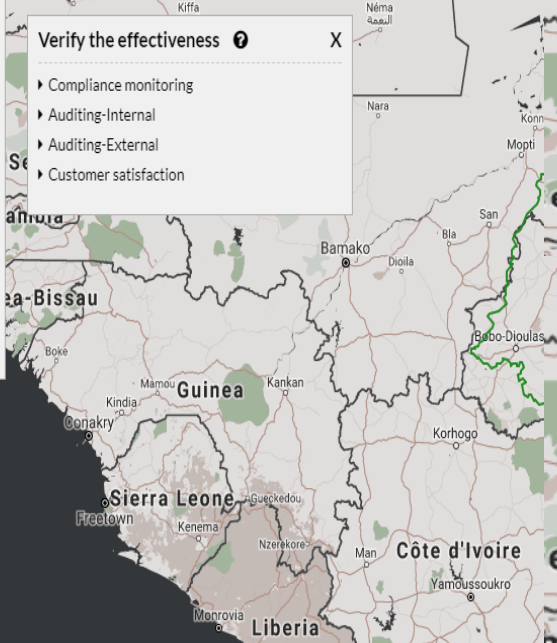
Hazardous Event	Control Measure	Critical limit	What	Where	When	How	Who	Corrective action	Data provider	Data type
introduction of pesticides through farming long the banks	Catchment\Restricted access to catchments	buffer limit	all activities	catchment	monthly	site inspection	water resource manager	catchment is free from all activities		



Flood and Drought Portal

Plan: WSP-volta User: brenda Last change: 2018-01-16 13:49:24 Description: Water Safety Plan Implementation in the Volta Basin

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Verify the effectiveness ⓘ X

- ▶ Compliance monitoring
- ▶ Auditing-Internal
- ▶ Auditing-External
- ▶ Customer satisfaction

Management procedures ⓘ X

Upload
(Supported formats: .txt, .doc, .docx, .pdf, .csv, .xls, .xlsx, .png, .jpg)

Supporting programmes ⓘ X

Upload
(Supported formats: .txt, .doc, .docx, .pdf, .csv, .xls, .xlsx, .png, .jpg)

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Periodic Review of the WSP

Open New Edit

Review #	
Date	
Implemented	
WSP team changes	
Catchment changes	
Treatment changes	
Distribution changes	
Stakeholder changes	
Changes in operational data	
Based on new risks	
Verification review	
Internal & External audit	
Stakeholder communication	
Next review meeting	

Revise WSP after an incident

Open New Edit

Revision #	
Date	
Cause of the problem	
Hazard identified at WSP risk	
Actions	
Communication problems	
Emergency Consequences	
Risk assessment improvements	
Procedure improvements	
Training improvements	
Communication improvements	
Emergency response	