


## Hydrogeological Survey in Faryab - Afghanistan

<b>TRAINING COURSE SUMMARY SHEET</b>		<b>NORPLAN</b> 	
Macintosh HD3:Users:sveinstoveland:Dropbox:Hydrogeology Afghanistan:Training_capacitybuilding:Course 1.7 Planning and implementing Provincial Hydrogeological Surveys:Summary sheet 1.7 Hydrogeological mapping methodology.docx			
<b>Course title:</b>		<b>Course no</b>	
<b>Hydrogeology I</b>		1.7	
<b>7. Planning and implementation of provincial hydrogeological surveys</b>		<b>Date prepared:</b>	
		18/7/2013	
<b>Training purpose</b>	<p>To enable water resources planners, engineers and hydrogeologists to understand a variety of approaches to hydrogeological mapping and surveying.</p> <p>To give them insight into the methodology that NORPLAN has developed for Faryab, and to evaluate why it may be applicable to other Provinces</p> <p>To provide a workshop environment, during which experienced Afghan hydrogeologists can interact with the NORPLAN team to establish a hydrogeological mapping classification relevant to Faryab.</p>		
<b>Target group</b>	<p>Education level (degree/ technicians etc):</p> <p>Should have a background or good appreciation of geology, water resources and data management.</p> <p>Should be able to use computer tools such as Excel and Google Earth.</p>	<p>Experts/national planners/provincial/ district:</p> <p>Experts/national planner/provincial planners</p>	
<b>Course details:</b>	<p>Course language(s):</p> <p>Duration(days):</p> <p>Planned course location(s)</p> <p>??</p> <p>Should ideally have access to computers with good internet connection</p>	<p>English (translation to Dari)</p> <p>No. participants per course:</p> <p>Up to 15</p> <p>Responsible presenter:</p> <p>David Banks, assisted by</p> <p>Andreas de Jong, Prof Eqrar</p>	<p>Theoretical /practical/training?</p> <p>3 days in class</p> <p>Handouts to be prepared by:</p> <p>Presenters</p>
<b>Summary syllabus</b>	<p><b>Core lectures</b></p> <p>Approaches to hydrogeological mapping (DB)</p> <p>Using Soviet hydrogeological and topographical maps (DB)</p> <p>Data entry and quality control</p> <p>Field surveys</p> <p>Sustainability and recharge (DB or AdeJ)</p> <p><b>Core practicals</b></p> <p>Examination of some international hydrogeological maps; prognosis based on Cambridge to Maidenhead map</p> <p>Understanding and extracting data from Soviet maps</p> <p>Maimana Airport map interpretation exercise (potentially 0.7 to 1 day practical)</p> <p><b>Core workshop</b></p> <p>Classifying hydrogeological units on the Faryab geological map using IAH guidance (DB). Important for the key experienced hydrogeologists to attend this</p> <p><b>Optional lectures</b></p> <p>Assessing aquifer properties from sparse data (DB)</p> <p>Non parametric statistics as a tool for aquifer characterisation (DB)</p> <p><b>Optional practicals</b></p> <p>Use of DACAAR files. Data entry and quality control</p> <p>Assessing aquifer properties from sparse data</p>		

## Hydrogeological Survey in Faryab - Afghanistan

<b>TRAINING COURSE SUMMARY SHEET</b>	<b>NORPLAN</b> 
--------------------------------------	--

Macintosh HD3:Users:sveinstoveland:Dropbox:Hydrogeology Afghanistan:Training\_capacitybuilding:Course 1.7 Planning and implementing Provincial Hydrogeological Surveys:Summary sheet 1.7 Hydrogeological mapping methodology.docx

<b>Training-equipment required</b>	<p>Equipment for the theoretical course: Ideally 1 PC between two participants and internet connection</p> <p>3 copies of a BGS Hydrogeological Map (Cambridge to Maidenhead) 30 cm ruler for each participant Pencils (H), A4 graph paper (1cm bold divisions, 1 mm subdivisions) x 4 sheets per participant Tracing paper A4 x 2 sheets per participant Calculator for each participant</p>
<b>Training material</b>	<p>1 copy of Hydrogeological Survey Methodology document (2 Parts) for each participant 1 CD-ROM or memory stick containing maps, literature and other materials</p> <p>If computers or internet connection not available, it will be necessary to (i) Print out at least 5 copies of Mishkin's hydrogeological map (ii) 7-8 copies of one of the Soviet map sheets in colour (iii) Practical materials in colour, with text translated to Dari</p>
<b>Field/practical training.</b>	No field training
<b>Prepared by</b>	Prepared by: D. Banks.