

Cadastral mapping of water as an individualised human right: Water, water everywhere, nor any drop to drink

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I am so sorry I am unable
to present this personally,
due to COVID constraints.
Please note the concepts
in this paper can also
be applied to distribution
of essential goods for the
use of households in need
during the pandemic.

FIG Working Week 2020 - Amsterdam

Every human has the right to shelter (housing), food and water

Title deeds record an owner as an individual right holder
This makes landowners' rights stronger than their dependents' rights

Individualised title deeds leave others in the household group at risk



Records for potable water in the name of one person will run the same risk

Image L Downie ©

The South African cadastre is now at a WATERshed

- Private ownership by individualised deeds and surveyors' diagrams have been registered in the Cape cadastre over five centuries, with South African land titling implemented by the Dutch in late 1600's
(Titling system retained by British colonisers)
- * A deed of transfer (*transportakte*) is still the 'vessel' that transfers land
- * Deeds for land are registered in the names of individuals or co-owners
- * Rights of poor dependents that are not recorded in the cadastre are easily lost
- * Pro-poor water rights in SA use a similar individualised 'vessel' to record water in the name of an accountholder

Is it time to get out of the boat?

Dutch Vessel in a Strong Breeze

© National Gallery London

Willem van de Velde the Younger

Image of painting
'Dutch Vessel in a Strong Breeze'
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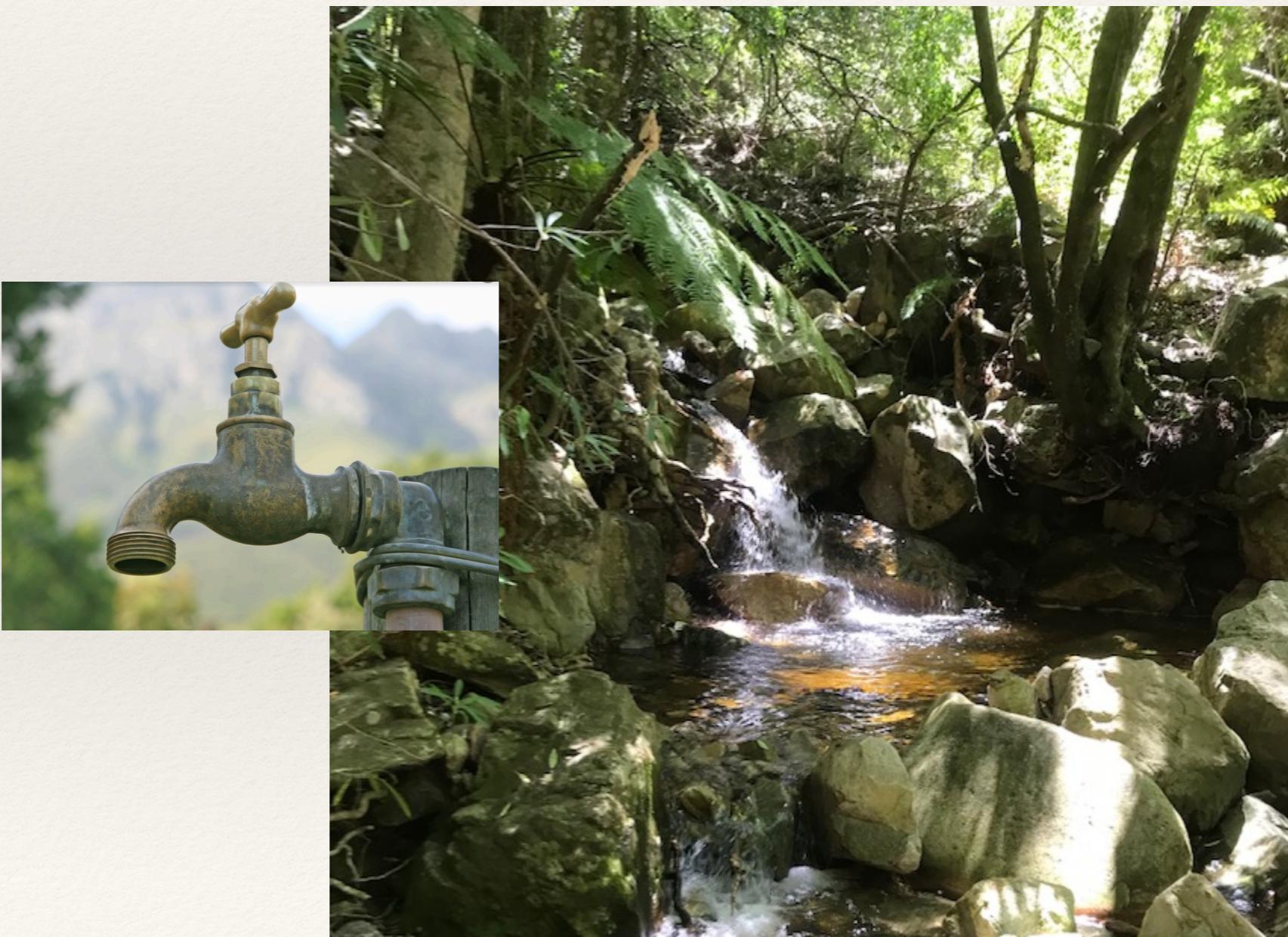
Dutch Golden Age marine artist

(British seascape and landscape artist)

Late 1600's

The Western Cape in South Africa recently had a serious drought. A 'day zero' was imminent, in which municipal potable water could no longer be supplied. This paper looks at the scenario of citizens needing to queue for water. The issues are similar to those for queuing for essential goods during COVID lockdowns.

DAY ZERO - the day taps run dry



The South African cadastre is now at a WATERshed

A cadastre / land information system (LIS) records entitlements
Water records will be included in our integrated and consolidated system

SA is working towards
one data portal
for all land
administration and
information records



Will 21st Century
imperialistic wars
/ group conflicts
be fought over
water before land?

Records for potable water should be seen as a critical *titling* challenge

CADASTRAL TITLING: Does the West know how to go about it?

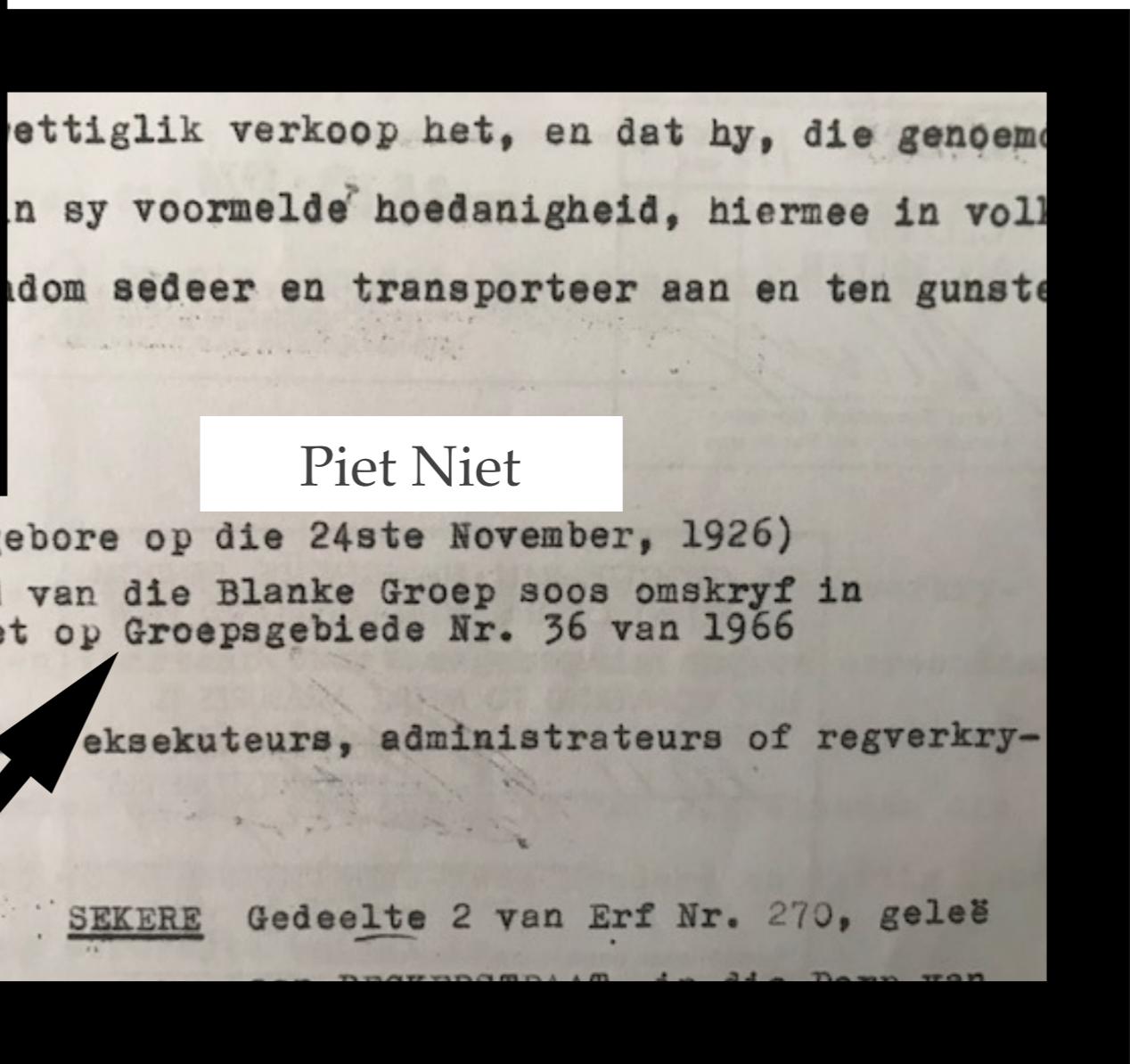
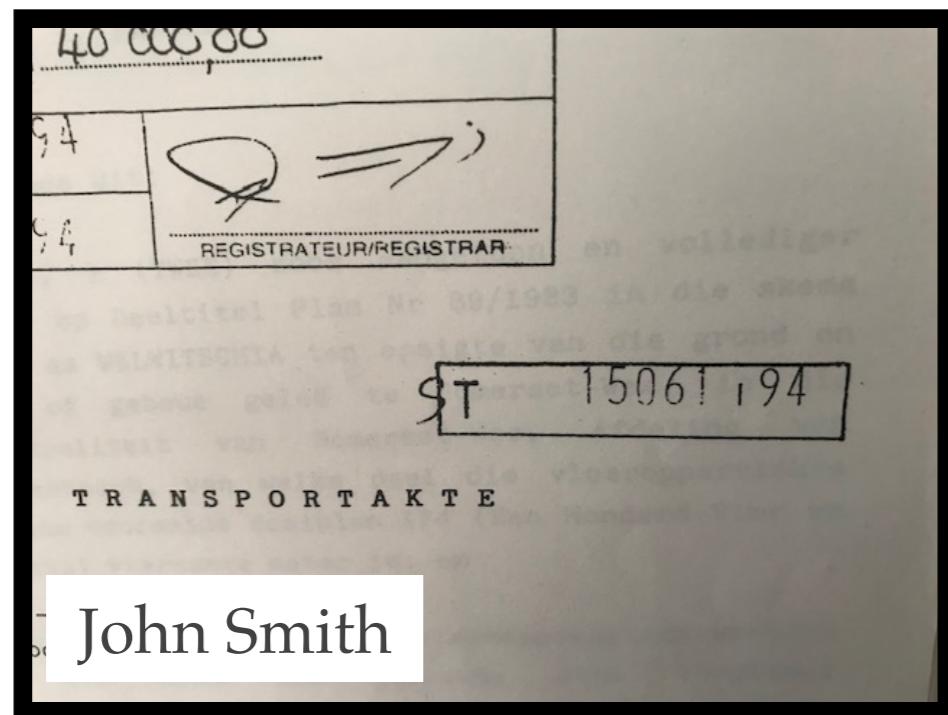
The African communitarian worldview often conflicts with the Western notion of individual rights. Individualised title deeds (and being able to sell land) is problematic in customary societies.



Constitutional equality principles founded on Western philosophical principles often conflict with group and traditional rights

Will 21st Century land and water information systems achieve a better balance between communitarian rights and individualised rights?

Centuries of rights that have been lost were facilitated by colonial and apartheid cadastre



(A member of the White Group as described
in the Group Areas Act no 36 of 1966)

Centuries of women's rights lost with patriarchal cadastral practices

Eg: Wives' names often left out of older land records —> rights made invisible



'Consummation Close'

'Consummation Close' L Downie ©
Rodin image courtesy of the Rupert Museum

The legal and surveying professions are
The gatekeepers of formal land records
and how they should be structured

Every LIS practitioner should read:
Invisible Women: Exposing data bias in a world designed for men
Caroline C Perez 2019



Who is responsible?
'We men' / 'Wo-men'



Every human has the right to shelter (housing), food and water

Title deeds record an owner as an individual right holder
This makes landowners' rights stronger than their dependents' rights

Individualised title deeds (in the name of an owner or co-owners) often leave the rights of other vulnerable dependents in the household at risk



Records for free potable water intended for a an indigent household (but recorded in the name of one person) will run the same risk

Image L Downie ©

Designing an LIS for water: Focus on the law as a process

SA gives indigent households 6 Kl of free water monthly

APPLICATION FOR INDIGENT/SUBSIDY ASSISTANCE

Note:

- This application is to be completed by the person responsible for the payment of the account.
- Copies of the following documents must accompany the application form for consideration:
 - municipal account,
 - identification documents of all occupants above 18 yrs,
 - pension certificates if pensioner
 - proof of income or affidavit of unemployment for all occupants above 18 yrs
- In order for the application to be considered, the applicant may not have more than one property.

Municipal Account Number : _____

Name of Account Holder / Applicant : _____

Date of Application : _____

Owner (Please tick with X) _____ Tenant (Please tick with X) _____ Number of properties registered in applicants name: _____

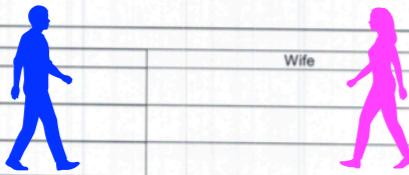
Residential Address : _____

Area: _____

Erf Number: _____

Husband Surname: _____ Wife Surname: _____

First Names: _____ ID Number: _____ Telephone: _____



LIS practitioners must use their common sense. Watch how the process of recording the 'right holder' affects other's rights.

Occupant 3		Occupant 4
Surname :		
First Names :		
ID Number :		
Telephone number:		
Relationship to account holder:		
Income:		
Employer:		
Employer Tel number:		

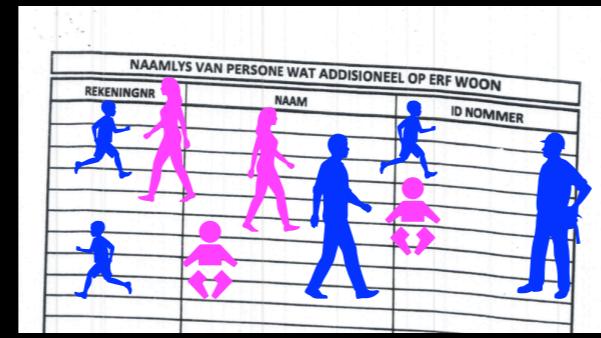
DECLARATION

I _____ the undersigned, hereby declare that the information provided above, is to the best of my knowledge true and correct and further acknowledge that:

- This application for registration is subject to Council approval and / or whosoever is authorized to do so.
- I acknowledge outstanding amounts owing to the Council on account number _____ and accept that it remains an obligation from my side.
- I must pay all future service consumption rendered by the Council to me and if I fail to pay the normal Credit Control Policy measures will be applicable to me.
- In order to avoid cancellation, I also understand that my average electricity consumption must not exceed 350 kWh over a period of 4 months, and the average water consumption must not exceed 15 kl over the same period.
- The information is public and will be given to all interested parties both in the private and public sector including the provincial and national government as well as the Credit bureau.

Name of Interviewer: _____	Name of Applicant: _____
Signature of Interviewer: _____	Signature of Applicant: _____
Date: _____	Date: _____

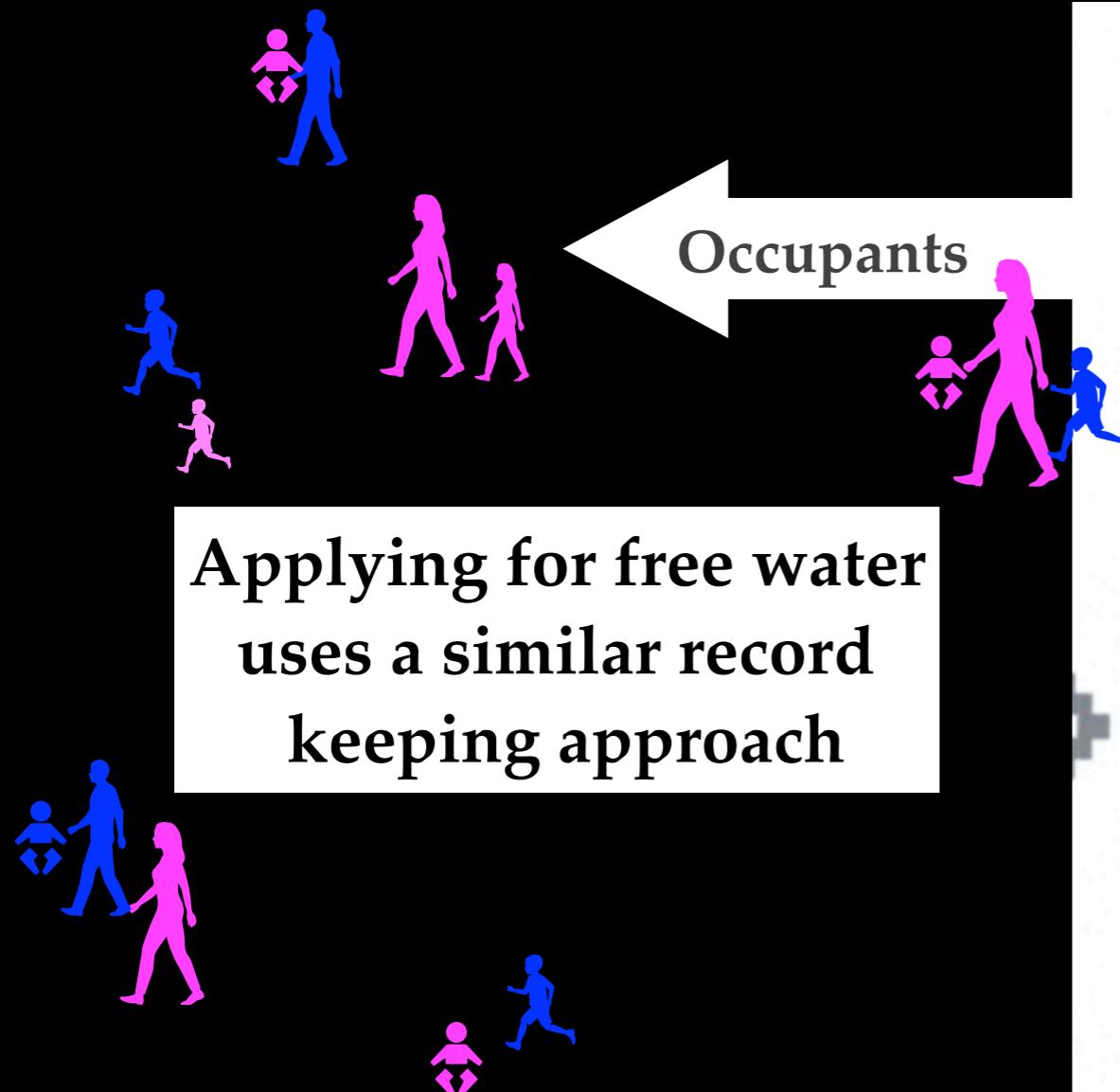
Applicant



When you fill in a government form look how sole right holders are created. Watch how the information about dependents 'walks off' the official page.

Account holder = the formal holder of the free water right

1 in 3 parcels of privately owned land registered in the SA cadastre was previously state-subsidised. Most awarded for free to households in need. BUT individualised land titling left household dependents invisible.



NAAM / NAME.....
REKNR / ACC NR.....
DATUM / DATE

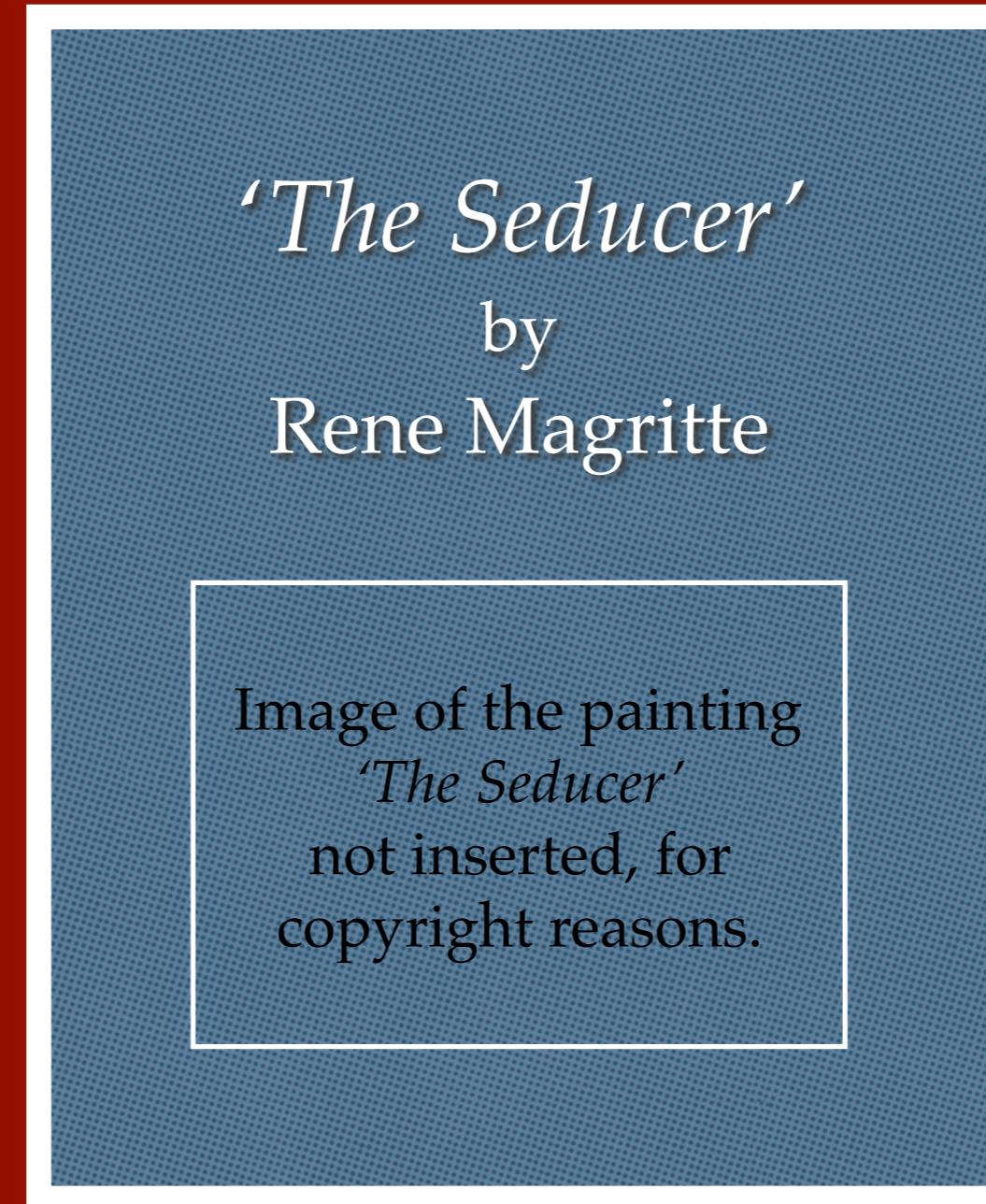
AANSOEK OM TOEKENNING VAN DEERNIS EN/OF SUBSIDIES

- DIE KRAGVERBRIUKE MAG NIE MEER AS 350 EENHEDE PER MAAND WEES NIE
- THE ELECTRICITY USAGE MUST NOT EXCEED 350 UNITS PER MONTH
- DIE WATERVERBRIUKE MAG NIE MEER AS 15KL PER MAAND WEES NIE
- THE WATER CONSUMPTION MUST NOT EXCEED 15KL PER MONTH

Sole applicant

HANDTEKENING VAN REKENINGHOUER:
SIGNATURE OF APPLICANT

**Information about individual dependents must be recorded
If not, dependents' human right to water will remain an *illusion***



**Correct cadastral mapping of indigent dependents could offer
a real-world solution for resolving many water conflicts**

THANK YOU

Leslie Downie

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