

More than 5,000 women from the U.S. to the coast of New Zealand have identified themselves on an ESRI map in an effort to strengthen the community of women in the GIS industry.

As a field, geography hasn't exactly been trailblazed for women. Executive editor of Directions Magazine, Adena Schutzberg, stated, "I was keenly aware when I graduated with a masters in geography that my class only had 17 people in it, and only four of them were women." While several women hold notable positions within the GIS industry, it's been difficult to find local communities of women in this profession.

This year, Morgan State economics professor Dr. Linda Loubert started a grassroots movement to change that. Dr. Loubert set out to put women in the GIS profession on the map, literally. In what has become the top talking-point for women in the GIS community, Dr. Loubert created an interactive ESRI map for women to show where they work. More than 5,000 women from North America to South Africa, and from the Middle East to the coast of New Zealand have contributed to the map. With nearly 40,000 views and countless articles written about it, the map shows how well-represented

women are in this industry and is a great networking tool for everyone involved.

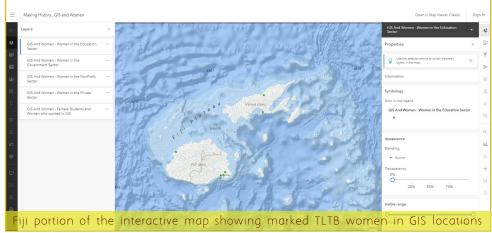
# Changing Viewpoints and Building Connectivity

As GIS professionals, we know that success is not solely determined by accurate mapping, but rather by how strategically the data can be applied to a situation. This is the first time women in the GIS community have had the ability to be accounted for throughout the world, and while the metrics themselves are astounding, it's the data that holds the most promise.

From this map, a young woman just starting her GIS career can see which

areas have the highest concentrations of other women professionals in a specific job sector. Or, if she doesn't want to move far from home, she can see which sector is most popular in her region. Women looking to network in the industry now have a tool. This map (something we're all familiar with in this profession) offers a direction and path for their individual careers.

TLTB women in GIS are among the first in the Pacific Region to mark themselves in this interactive map alongside their counterparts from the US, Europe and Australasia. This interaction can provide mentorship, method sharing, assistance and even job opportunities.





# **TLTB WOMEN IN GIS**

Compiled by GPO Moria Gaunavou

Malo a bula and welcome to Nai Bulibuli's March Edition!

2021 International Women's Day was celebrated on the 8th of March with the theme "Women in Leadership: Achieving an Equal Future in a COVID-19 World".

Women have undisputedly proven to contribute vastly in various fields like education, politics, science and so on.

This month, I would like to focus your attention on the female employees of TLTB, who are engaged in the Geospatial

Currently there are seven women who are in this field and they have shared their experiences and advice to young girls who are interested and aspiring to join the Geospatial field in the future.

## **GIA ANA QIOLEVU NAUSORI OFFICE**

stereotype made things a bit more rezoning. challenging for me when I knew that I back in 2018.

However, I was thankful and relieved that when I began, I had the company of female geospatial officers GA Vikatoria Williame & GIA Siteri Vunisa in the North GIA Siteri Tinai West Region. I definitely learnt a lot from our geospatial officers and as the experience and knowledge.



to the TLTB ArcGIS server, charting New and consultation purposes and so on. Lease Applications, inserting x and y To be part of the TLTB GIS team is awesome coordinates together with the particulars and challenging at the same time

of land details, Lease Plan (AFL/IOT/TAW) drawing, LDVC inspection and report compilation. I also engage myself in GIS is known to be a male dominated doing special projects assigned by Senior area of workand this has been the officers such as scheming of new potential norm for quite a number of years. This area for lease and providing reports for

Moreover, our organisation can be a would be securing a formal employment testament to the increasing participation of females in the Geospatial Field.

# **NORTHERN OFFICE**

Sa yadra, my name is Siteri Tinai and years went by, I was able to gain a lot of I am from Bureiwai, Nakorotubu, Ra. I graduated from the University of the South Pacific with a Bachelors Degree in Environmental Science in 2019.

I began this GIS journey when I had first joined the technical department in the Northern Region, as a Temporary GIA. Nineteen months into my career, I was transferred to the South West region than later returned to Labasa in October 2020. Four months later, I than had received my offer as a Geospatial Assistant. I learnt a lot from the two different regions I had previously worked in and the experiences have taught and moulded me till date. Generally my duties include assisting staff the GIS data. with managerial duties but I tend to focus What I studied in University and the task more on technical tasks. I am also tasked carried out in TLTB in geospatial was very to provide and assist clients; LOU's with different and this was a challenge I had lease and NLC boundaries upon MN's to take on. Some of the tasks I carry out approval, data collection using GNSS include conducting inspections with tools, serve stakeholders, surveyor's and the estate team, uploading information land owners, provide maps for inspection

T\GIA Nanise Maiesia CENTRAL\EASTERN OFFICE

of points of interest or simple x,y (latitude, longitude) coordinates. Spatial data takes into account its characteristics, its surrounding features

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because for one, it is a male dominant field and anything to do with GIS is IT related; as a GIS officer, I have to be accurate with the work I do in providing information I provide and this requires me to constantly keep up to date with

Spatial data is more than just locations

such as its vicinity to water resources, electricity, access, its elevation and much more. Being in the geospatial section, it gives me a bird eye view of native leases and their respective demarcations. In this sense, we see and understanding what is happening on ground remotely.



grateful for.

solutions.

#### **GIA Siteri Vunisa** SAVUSAVU OFFICE

Cola Vina! My name is Siteri Vunisa. I'm originally from Naibalebale, Viwa, Yasawa & I graduated with a Bachelors of Science in GIS and GE.

I started my career at TLTB under the Data Cleaning Project as an attaché and I then moved on to becoming a T\GPO Moria Gaunavou & GA Vikatoria project officer. I joined the technical Wiliame department under the North West Region GIS TEAM, IT DEPARTMENT in 2018, and had just been recently Bula Vinaka!

had to learn to get out of comfort zone Geospatial Information System can be and I was grateful to have been under defined as a framework for gathering, the teachings of my former supervisor GIO managing, and analyzing data. Tomu Vatucicila who helped me achieve Rooted in the science of geography, that.



office has been an eve opening experience. While at Savusavu office I was installation of GIS softwares and able to grasp the knowledge and skills in attending GIS forums and meetings both estate and technical background upon invitation. After joining TLTB, I have come to & that contributed to the achieving of understand the challenges iTaukei land targets that are involved outside my field owners are faced with. At the same time, of study from TL Waqasaga, EA Sowane this indicates that there is an opportunity and FC Lalabalavu. It is a good learning to enhance our services. Learning is not experience trying to familiarize myself with limited to our University studies but it is estate work which I am also adapting to as well and these duties include handling This new opportunity has enabled me new lease applications, normal counter to learn new geospatial tools and services, carrying out and assisting with techniques that have added on to my inspections, consultations, attending to previous knowledge, to which I am very the teams requests and most importantly serving the land owners in the form of To women who wish to join the geospatial clarification, confirmation and assuring field, I believe there is a great opportunity the right information to our stake holders, that we may use our skills to enhance landowners and clients. At the end of the services and provide solutions to our day; delivering to the expectation of our relevant stakeholders, including women stake holders/land owners and clients stakeholders. Geospatial techniques matter. So if you are able to bring yourself Working at IT Department is fun and can be integrated qualitatively and out of your comfort zone and juggle exciting. Everyday we get to assist quantitatively. Geospatial is diverse. responsibilities with work, then I strongly Regardless of the industry, geospatial encourage those women who wish to officers from the regions. Since we are data and techniques could provide excel in the GIS field here at iTaukei Land stationed at IT Department, we have Trust Board . Being part of the technical also learnt some basic IT skills like team at TLTB which is also known to troubleshooting, zoom meeting set be a male dominant field has been a up, VNC, remote desktop connection good learning experience. It really tests assistance and email log on refused you to the best of your abilities and also assistance to staff. We try our very strengthens yourself mentally and also is a best to serve our customers, both good learning process.

transferred to Savusavu Office. Being in Our names are Moria Gaunavou and not limit yourself and always aim to be a male dominant field particularly in the Vikatoria Wiliame and we are stationed of service holistically in all areas of your operations area has taught me alot. I here at IT Department, Head Office.

GIS integrates many types of data. It analyzes spatial location and organizes layers of information into visualizations using maps and 3D scenes.

When one mentions GIS, terms like remote sensing, differential correction, 3D, maps, co-ordinates comes to mind. Our work here at TLTB includes monitoring of leasemaster charting, CBUL lease verification and monitoring, ArcGIS Online, mobile app and web map assistance, monitoring of leasemaster charting, Survey123 report extraction, creating

My transition from Lautoka to Savusavu and resetting ArcGIS online credentials, GNSS troubleshooting and assistance.



different types of request from GIS internal and external, thus meeting our vision of "Excellence in land management services to meet the expectations of our stakeholders". Our advise to young ladies who want to join the Geospatial field is "Sky is the limit". If you have graduated with a Bachelors Degree, try and pursue Post Graduate, Masters and Doctorate! Do

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#### **GIA Likusima Breckterfield NORTHWEST OFFICE**

Bula re!!!!!!

My name is Likusima Naigalu and I am from Bagata, Wailevu in the Province of Cakaudrove.

My journey to become a Geospatial Officer is not an easy one. I left School after complete Year 13 and was inspired to continue with my studies after giving birth to my youngest daughter. I am a mother to five beautiful children to motivates me to become who I am today since my husband was the sole bread winner.

GIS journey on October 19,2020 as a for clients once approved from the Temporary Geospatial Assistant. My Manager and also assist 360 team



I pursued further studies in the University work as a Temporary GIS Assistant is to of the South Pacific doing Diploma attend to SEO(O) instructions for locality In Geospatial Science . I began my maps, assist and prepare LOU maps

with inspection plotting's.

I love being part of the North West team and I appreciate former NW Geospatial Assistant, GIA Vunisa and GIO Vatucicila for guiding me along and assist me whenever I seek for their assistance.

My advice to young girls out there who would love to join GIS is that, even though GIS is a male dominant field it will be possible for women who have been willing to work with man as this will increase gender equality in the workplace.



## FIJI PUBLIC SERVICE SURVEY DRAUGHTING EXAMINATION (FPSSDE)

by GIO Tomu Vatucicila

Lands Department, the exams is to give subjects in November; you a certified certificate of becoming a registered drafts man in our field of work 
Stage II May Sitting

I started my examination in 2012 from B. Photogrammetry & Remote Sensing stage 1 programs which covers 2 months C. Survey Computation II sitting, May sitting & November sitting, D. Cartography & Mapping II and one of the main conditions with the Stage II November Sitting exams is to pass stage 1 in order to sit for E. Plan Drawing (Practical Training stage II the following year which is part who attends the exams every year due to limited sitting the exams.

#### Exam Reference:

Stage I covers seven subject altogether, The exam was very insightful in our field four subjects is covered on the May sitting and three is covered on the November sitting, all subjects are mainly draughting programs such as;

#### Stage I May sitting

- A. Draughting Theory & Instruments
- B. Survey Plan Drawing
- C. Introduction to LIS/GIS
- D. Photogrammetry

### Stage I November Sitting

- E- Survey Computation 1
- F- Civil Service & Departmental Knowledge
- G-Cartography & Mapping

Once you complete stage I with the passing mark of 60% above than you are

I joined the board back in 2003 and eligible to sit for stage II which covers six of work; it covers more on the it was one of the requirements for all subjects only, the first four subjects must processes of Survey and calculation, Technical Officers then is to sit the FPSSD also be passed with 60% above or you you will also learn the different types of examination organized by the Ministry of will not be eligible to sit for your final two Mapping system and process, we were

- A. Land Surveying & Field Measurement

- 6hrs, Final 6hrs)
- of the final stages, the Board decides F. Cadastral (Practical Training 3wks, Final the Board is fortunate to be part of 3wks)

#### **Exam Review:**

fortunate enough to be learning the software that is mainly used by Lands Department on plotting which is Liscad and Microstation where we compiled our final stages in stage II, having to sit for the final stages on Plan Drawing and Cadastral is exciting, because you get to learn more on how draftsman compile Survey reports and do plotting on various data collection by surveyors, this programme since it is also part of the Geospatial appraisal to undergo the exam and receiving your Certified Certificate on completion.



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## CUSTOMISED PENDING NOTICES LAYER FOR ARCGIS EXPLORER

was created

CE EO Arrears Marika came up with the idea to see if there is a way to show all pending notices geographically on their mobile phones. He had a long list of tenants that are vet to be served notices but needed a way to be able to locate them in the field.

## Creating the Online Layer

The pending notices list was exported into CSV format and added as a layer in GIS. The join feature tool is then used to join the CSV file to the Leasemaster using LeasematerID as the unique identifier. The attributes of Leasemaster layer were deleted as all we need from that layer are the georeferenced polygons of each

The new resultant file is zipped and

The CE Region Arrears team have uploaded into ArcGIS Onilne, saved successfully implemented an ArcGIS and published after the properties were Explorer work methodology that configured. This file can be viewed and could potentially redefine the serving used for navigation in ArcGIS Explorer of notices and arrears collection for App or used in a totally new ArcGIS the Board. After initial discussions with Online App like QeleMaroroi. The layer the Geospatial team, an online layer can be searched in Explorer using the

1:43 4 0 0 .



filename. In this case, the filename is Pending Notices Batch 01. With that done, the Arrears team can now go onto the field and navigate to each lease. Furthermore, the details of each each lease is tabulated onto the screen simply by selecting the polygon. This minimises paperwork and having to carry files as all the data is loaded digitally in ArcGIS online.

In addition to the Explorer component, quick survey's can be carried out using customised Survey 123 for Arrears. This creates a systemmatic way of collecting data which will assist TLTB in understanding our tenant's problems.

Officers in different departments are encouraged to discuss with the Geospatial Team at Head Office any ideas they have because only then can we look at possibilities and how it can be applied to our work procedures.



#### ARCGIS ONLINE UTILISATION STATS - MARCH Renewal Date Credits Remaining 7/8/2014 6/1/2022 20,878.57 Quick Date Select \* End: Start: 3/1/2021 3/31/2021 Credits Content Apps Members Groups

Mar 1, 2021, 12:00:00 AM GMT - Mar 31, 2021, 12:00:00 AM GMT

