



## EXECUTIVE SUMMARY

### COMPREHENSIVE LAND USE PLAN (CLUP) OF DELFIN ALBANO, ISABELA CY 2018-2027

#### I. Vision

A Center of agro-industrial development in Northern Isabela with God-loving and empowered citizens living in a disaster-resilient community and ecologically-sound environment with integrated infrastructure support systems and vibrant economy led by responsive and transparent leadership.

#### Mission

To improve the quality of life for all residents of Delfin Albano by maximizing opportunities for social and economic development in order to become the agro-industrial center in Northern Isabela while retaining an attractive, sustainable and secure environment.

#### II. Brief Situationer

##### A. Physical Profile

The municipality is composed of twenty-nine (29) barangays and seven sitios. Barangay Ragan Sur is the seat of Government that is centrally located along the Provincial / National Road from Ilagan and Mallig to Delfin Albano to Santo Tomas and Santa Maria this province.

Delfin Albano has a total land area of 19,095 hectares. It is located some 35 kilometers, northwest of Ilagan, the capital town of the Province. It is bounded on the north by the municipality of Sto. Tomas, on the east by the municipality of Tumauni, the Cagayan River as the natural boundary, on the west by the municipalities of Quezon and Mallig and on the south by the municipalities of Quirino and Ilagan with Mallig River as natural boundary.

Delfin Albano is subdivided into two (02) physiological areas namely the Eastern Area long the Cagayan River which is good for intensive agriculture and high density urban development as the western area along the mountain range which is good for intensive agriculture, pasture and forest purposes.

##### B. Demography

As of 2015, Delfin Albano has a population of 26,614 as per census of the National Statistics Authority. Table DE-6 presents the increase in the population of Delfin Albano from 1990 until 2015 vis a vis provincial, regional and national populations. The table also shows the different average growth rate in the population of Delfin

Albano. The population of the municipality in 2010 is 25,422, hence, the average annual growth rate between 2010 to 2015 is 0.92%. The population is projected to reach 29, 706 in 2027. The population is expected to double within 75 years.

**Table DE-6. Historical Growth of Population**

Year	Population		Annual Growth Rate (%)			
	Total	Increase/Decrease	Municipal <sup>3</sup>	Provincial <sup>1</sup>	Regional <sup>1</sup>	National <sup>1</sup>
1960	10,742					
1970	13,905	3,163	2.61	3.91	3.7	2.87
1975	15,585	1,680	2.31	2.42	2.62	2.75
1980	17,725	2,140	2.61	3.57	2.75	2.66
1990	20,410	2,685	1.42	2.18	2.01	2.33
1995	21,811	1,401	1.34	1.46	1.51	2.32
2000	23,619	1,808	1.61	2.10	2.25	2.36
2007	24,899	1,280	0.76	1.22	1.16	2.21
2010	25,422	523	0.70	2.05	1.92	1.11
2015	26,614	1,192	0.92	1.36		

Source: NSO/PSA

## C. Economic Sector

### 1) Agriculture

The municipality's total farm area is 7,585 hectares, which is approximately 39.83% of the total land area of the municipality. The basic crops grown are rice, corn, cassava and vegetables. The municipality engages in rice production as its primary agricultural activity.. A total effective area of 5,897 hectares is devoted to rice production.

In 2016, total production for both irrigated and rain fed areas reached 33, 163 metric tons (M.T.)valued at P 563.771 million pesos. Corn production is the secondary user of agricultural land in the municipality. A total of 2,605 hectares is planted corn. Total production in 2016 was 65,125 metric tons.

### 2) Forestry

Delfin Albano has a total land area of 19,095 hectares; of which

74% or 13,718 is alienable and disposable and only 36% or 5,325 hectares are forest lands. Out of the 5,325 hectares of forest lands, only about 1,000 hectares are timberland, the rest are grasslands or pasturelands

### 3) Commerce

The Public Markets found in Ragan Sur (Poblacion) and barangay San Antonio are the primary concentration of commerce in the municipality housing a variety of commercial activities. Most of the business establishments in the municipality can be categorized as small enterprises, most of which are sari-sari stores, based in the poblacion and scattered in the different barangays. Mostly, the sari-sari stores in the rural areas are attached to existing residential structures. In 2016, there are 464 business establishments recorded in the municipality. It is dominated by sari-sari stores and retail trade.

### 4) Industry

There are 30 different industries recorded as of 2016.The most significant economic agro-industrial activity of the municipality in terms of income and labor are the 8 rice mills with 15 buying stations There are also 4 furniture making shops, 8 iron works, 7 bakeries and 2 hollow blocks making.

### 5) Tourism

The prominent tourist attraction of the municipality is the TAPJ Resort located in barangay Aga. It is a large resort equipped with facilities like cottages, swimming pools and conference halls and endowed with natural and man-made physical attributes. The potential eco-tourist areas in the municipality include the Bird Sanctuary and Breeding grounds located in barangay Carmencita, Also on the western part of the municipality, there is a Mini Chocolate Hills and Table Hills. With its fascinating sight, it can be developed as picnic areas, camping areas or mountain climbing areas.

#### **D. Infrastructure**

##### **1)Transportation**

The municipality has almost 159 kms. of roads, 17 permanent bridges and a public transport vehicles coming in and out the municipality from Metro Manila and from Laoag City. Delfin Albano has four (04) major transportation routes as follows: The Delfin Albano-Tumauini route by crossing the Cagayan River thru the Delfin Albano-Tumauini Bridge leading to the Maharlika National Road, the Delfin Albano - Ilagan route to Gamu - Roxas road, the Delfin Albano - Mallig route to Santiago - Tuguegarao road and the Delfin Albano - Santo Tomas - Cabagan .

##### **2)Power**

Power requirement of the municipality is supplied by the Isabela Electric Cooperative, Inc. (ISELCO II) that comes from the National Power Corporation with a sub-station located at Cabagan, Isabela. Isabela Electric Cooperative II with office located at Ilagan, Isabela and a collection office in Delfin Albano, Isabela. As per data supplied by the ISELCO II, all the barangays have electricity except the far flung sitios.

##### **3) Water**

The main source of water supply in Delfin Albano was made operational to cater the domestic water needs of 13 barangays located along the National and Provincial roads in the eastern portion of the municipality. Shallow and Deep wells are also used in other barangays as sources of potable and domestic water. Level II artisan/deep wells with pumps are being consumed by 1,482 residents with an average consumption per hour of 5.06 cu. m per capita. Level III local waterworks system are being consumed by 4,451 residents with an average of 58.34 cu. m. consumption per hour.

##### **4) Communication**

There are three (3) cell sites of Smart, Sun Cell and Globe Telecommunications which provide the fastest means of communication thru mobile/cellular phones. The presence of two (2) way radio transceivers of the PNP and the Mayor's Office also facilitates communication in the municipality and to the province. There is a postal office, telegraph, telephone line, and one (1) cable provider.

#### **E. Social Services**

The Municipality of Delfin Albano has 20 public elementary schools, and 3 public secondary schools; 1 private elementary school and 1 private secondary school. There are no tertiary and vocational schools in the municipality.

The teacher-student ratio of Delfin Albano is 1 teacher to 27 students for a public elementary school, 1 teacher to 24 students for a public high school, and 1 teacher to 26 students for a private elementary school and 1 teacher to 42 students for a private high school.

There is one (1) rural hospital unit in the municipality which is located in Ragan Sur while there are five (5) barangay health units based in San Antonio, San Jose, Carmencita, Andarayan, and Bayabo. These medical health facilities are all in good condition. However, the hospital in Ragan Sur is the sole facility which has complete personnel while the barangay health units have one (1) midwife each.

Delfin Albano being a typical rural community has most of its dwelling units made of concrete, wood, and light materials. It has also implemented a Core Shelter Project for indigent families of the barangays of Calaocan, San Macario, Villa Pereda, Villa TJ at Carmencita, San Nicolas, Andarayan, Capitol, San Juan, and recently at Barangay San Antonio under the program of the Department of Social Welfare and Development.

Almost all barangays have their own day care except for Conception, Ragan Almacen, and San Patricio. All day care centers are in fair condition and have one (1) day care center worker. The day care center located in Ragan Sur has the most number of clientele.

The protective services are classified into three (3) kinds, namely, police, fire protection, and jail management. The Delfin Albano Police Headquarters is located in Barangay Ragan Sur with 26 personnel, two (2) vehicle patrol car, and (3) motorcycles, all of which are serviceable. There is also a police station in Barangay San Antonio with eight (8) personnel and one (1) patrol car. For the fire protection, there is one (1) fire station in Delfin Albano which located in Barangay Ragan Sur with seven (7) personnel and one fire truck. For the jail management, there is only one lock-up cell in Delfin Albano which is in Barangay Ragan Sur.

### III. Development Constraints

Perennial flooding due to soil erosion, overflow of Cagayan River, backflow issues, among others Lack of essential data Conversion issues within the boundaries of CLOAs Establishment of government-owned or administered cemetery
Fragmented/Uncoordinated tourism approach Advocacy programmes for local consumers to patronize local goods and services rather than neighboring municipalities

### IV. Development Opportunities

- 1.Strategic Location for Agro-Industrialization
- 2.Rich in Forest and Water Resources

- 3.Strong Political Will
- 4.Presence of potential Eco-Tourism Destinations
- 5.Strong Collaboration Between Government, Private and Civil Society Organizations (CSOs)
- 6.StablePoliticalLeadership–Continuity of programs is ensured for the next three years. The local chief executive is a hands-on leader with a strong political will to enforce even unpopular policies.
- 7.Medium to high intensity of agricultural activities;
- 8.Ideal Social Milieu
- 9.Controlled peace and order situation;
- 10.Availability of parks and recreational centers;
- 11.Ready, coordinated and functional disaster risk reduction and management institution, and
- 12.Strong presence of active private sectors/civil society government partners, among others.
- 13.Adequate and steady supply of electricity, water, and telephone lines(connectivity)
- 14.Empowered and Responsible Component Barangays
- 15.It has a clear and transparent provision of local taxes (tax code), functional inter-agency committees (LDC, CDRRMC, etc.), enacted Environmental Code, among others.

#### **V. Major Development Goals and Objectives**

The general goal of the Land Use Plan is adopted from the National Physical Framework Plan which is to “achieve a spatial arrangement and location of land use activities that would:

a. Effects of rational distribution of the population;

It is the rational urban development goal. Encouraging the sustainable growth of urban areas and complementing the growth of rural areas by adopting alternative urban development approaches.

b. Guarantee access by the population to basic services;

Linking consumption and production areas to achieve physical and economic integration through appropriate infrastructure systems.

c. Ensure optimum sustainable utilization of resources

Land is a finite resource, hence there should be a rational allocation of land resources.

d. Protect the integrity of the environment.

Observance of appropriate standards in natural resource management and balancing the demands of production with the need for preservation of ecosystems.

## **VI. Development Thrust and Spatial Strategy**

The Preferred Spatial Development Strategy: Controlled Urban Linear-Nodal Development

The municipality shall developed a two-pronged spatial strategy that will be a combination of nodal and linear urban form to be named the Controlled Urban Linear-Nodal Development. This strategy is believed to bring balance of growth in the urban core at the same time equalizing the development throughout the municipality through the development of new growth centers.

The controlled urban linear development shall run along south and north of the urban poblacion going to San Antonio in the south and San Patricio in the north.

The nodal concept of development calls for the designation of a barangay (based on its sized and population, existing transport system and services, and potentials for development), as a growth point area to serve as the initial focus of community development activities and location or sites of socio-economic projects. Moreover, as functional areas or service centers for specific economic activities, the growth point will have priority in terms of investment inputs to enhance its capability of attracting people either as consumers or producers and at the same time foster the economic development of surrounding non-growth areas. Based from assessment, it was determined that barangays San Antonio, San Patricio, Andarayan and Carmencita can act as the sub-centers or fulcrum for development for rural barangays adjacent or within their radii of influence. Hence, the San Antonio cluster in its future physical and socio-economic development encompasses its surrounding barangays in the south, the Carmencita cluster will serve the northwestern barangays, San Patricio will serve its adjoining barangays in the north and Andarayan will serve the western barangays.

It is envisioned that these growth point areas will gradually become self-reliant and self-sustaining communities as its residents will be mobilized as contributors and participants in attaining better life for themselves. Ultimately, these growth points will radiate development and stimulate the progress of outlying non-growth areas. In effect, they propel the overall growth of the entire municipality.

## **VI. Land Use**

### **The Concept Structure**

The structure plan depicts the emergence of four (4) minor growth nodes/corridors. These areas are linked by major roads and farm to market roads.

As described in the structure plan, the emerging four (4) growth node centers are cluster of barangays proximate with each other and have similarities in land uses, designated as follows:

The Southern Growth Corridor (San Antonio Cluster) – comprises the barangays of San Antonio, San Nicolas, Conception, Aga, and Villa Pereda. Its functional role will be commercial, tourism, industrial and agricultural development.

The Southwestern Growth Corridor (Carmencita Cluster) - comprises the barangays of Carmencita, San Mariano, Maui, Villa Pereda. Its functional role will be agro-forestry and eco-tourism development.

The Western Corridor Growth Center Andarayan Cluster). This comprises barangay Andarayan, San Isidro, Aneg, Sto Rosario, Capitol. Its functional role will be agricultural development as well as agro forestry development.

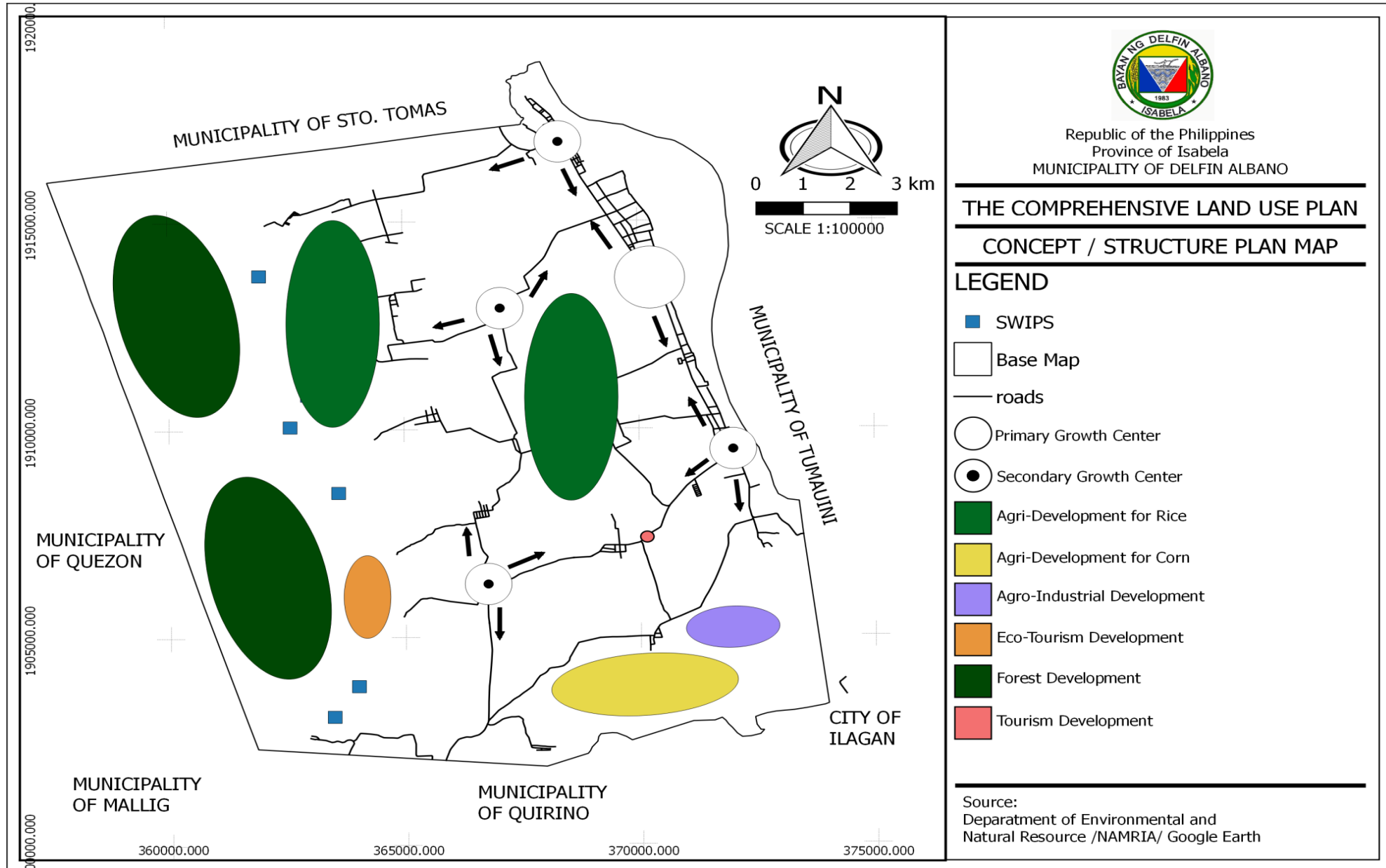
Northern Growth Corridor (San Patricio Cluster)- This comprises San Patricio, San Jose, Calinaoan Sur, San Andres, Visitacion, Santor, Bayabo and Calaocan. Its functional role is commercial, agricultural and agro forestry. The development of the nodes/corridors is expected to radiate to their outlying skirts/barangays.

The urban area of Poblacion which already manifests high urban density, doesn't encourage further intensification of activities in support of its role as the administrative center and educational center. The presence of the Municipal Hall and support facilities is expected to influence the development of adjacent barangays nearest the poblacion, which is made part of the major urban center. It is expected to go southward towards barangays San Antonio since existing trends already manifests a commercial development pattern along the highway. Barangays affected for commercial development are located between the Poblacion and San Antonio which will manifest linear type of development.

To support the municipality's vision of performing as an agro-industrial site of northern Isabela, a portion of barangay Villa Pereda shall be identified as the agro-industrial /industrial area of the municipality. Further, with a large water body, the banks along the Cagayan River, will become an eco-tourism site. Programs that can enhance the economic viability of the river as a tourism destination should be fully explored.

Barangay Carmencita will become the eco-tourism site where the mini chocolate hills, table hills and bird sanctuary and breeding grounds are located. The area for agricultural development particularly for rice and corn, shall cover the large parts of the central portion of the municipality.

e growth point areas will gradually become self-reliant and self-sustain





## **The Land Use Plan**

### **General Land Use Plan**

The existing pattern of development within the municipality shows that settlements are found generally established along roadsides. Among all settlements found in the different barangays, the three urban core barangays, Ragan Sur and San Juan and the barangay of San Antonio have higher intensity of development. The existing rural settlements outside these urban areas are characterized by the presence of agricultural lands to include grazing areas and forestlands where the greater majority of the populations depend as their livelihood and source of income.

In line with the municipality's thrust for agro-industrialization, an agro industrial shall be identified.

In compliance to RA 9003, the existing controlled dump site will be upgraded to Sanitary Land Fill.

### **8.1.1 Residential Areas**

The total settlement area for the whole municipality is 550.27 hectares comprising 2.88 percent of the municipality's land. This will increase to 938.44 hectares which are proposed for settlement uses purposely to accommodate future expansions on tangible developments to support increase in the socio-economic activities of the populace and the increase in population. Most of the identified residential areas are expansion of existing ones especially along the road where settlements are found. Settlements area are categorized as residential, commercial, institutional, parks and recreation and existing industrial uses like rice mills. Also to be included in this land use category are resorts and even socialized housing.

### **8.1.2 Agriculture**

The total existing agricultural area is 12,366.12 hectares, both production (12,262.48 has.) and protection agriculture (103.64 has) This area is proposed to decrease to 11,933 has since some areas will be converted to build up areas. There is a decrease of 437.91 has. or a reduction of 3.54 percent of the existing agricultural area. However, the area of protection agriculture is increased.

Protection agriculture will cover a total land area of 437.91 hectares, which is 2.29 percent of the total agricultural area. Protection agriculture will include all irrigated and irrigable areas of the municipality.

Production agriculture covering an aggregate area of 11,495.16 hectares is 60.20 percent of total agricultural area. Production agriculture will cover agricultural areas without irrigation and marginal agricultural areas.

### **8.1.3 Forest**

The municipality has an existing 704.09 hectares. This will increase to a total of 5,185.63 hectares, broken down as follows; production forest with 4,316.83 hectares and 868.8 hectares classified as protection forest. The municipality has already prepared a separate forest land use plan for this purpose.

### **8.1.4 Industrial Area**

A portion of barangay Villa Pereda is identified as the Agro-Industrial site of the municipality. It has an area of 32.94 hectares or 0.17 percent of the total land area.

#### **8.1.5 Open Grasslands**

Under the forest land use plan, all the existing grasslands are reclassified as forest, hence all grasslands shall be converted to forest.

#### **8.1.6 Water Uses:**

##### **1. Rivers and Creeks**

The total area of water bodies is 473.33 hectares, broken down as follows; river with 344.67 hectares and lakes with 128.66 hectares.

#### **8.6.7 Roads/Utilities**

The area of roads and utilities will increase from 80.46 has. to 104.81 has. This is because there are additional proposed roads to be constructed within the municipality within the next ten years.

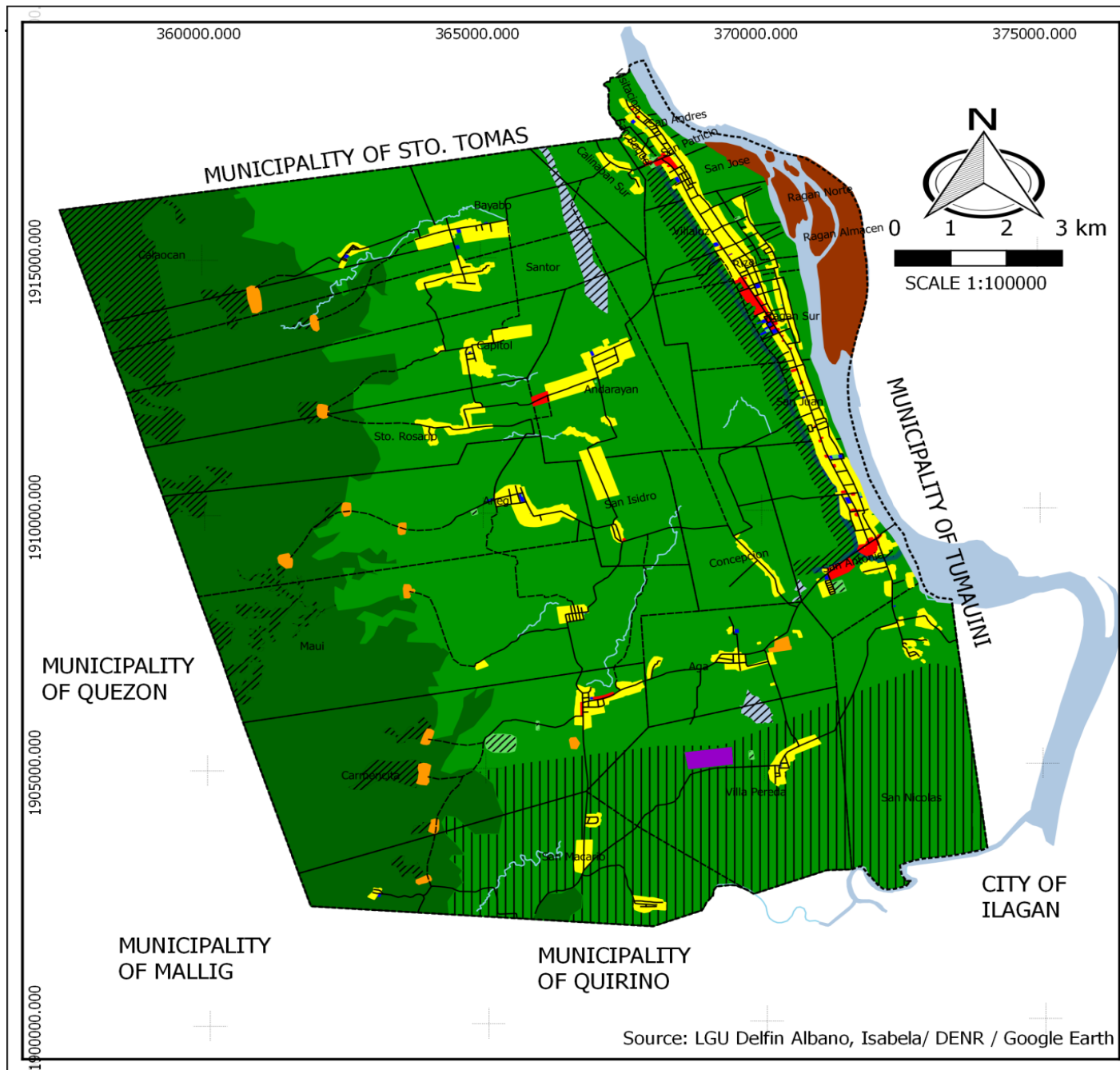
#### **8.6.8 Others**

Tourism Areas. This includes the areas occupied by mini chocolate hills, tables hills, bird sanctuary and breeding grounds. It has a combined area of 60.43 hectares.

Cemeteries/memorial parks. It covers a total area of 26.09 hectares.

Recreational Areas. It covers an area of 2.07 hectares





Republic of the Philippines  
 Province of Isabela  
 MUNICIPALITY OF DELFIN ALBANO

**THE COMPREHENSIVE LAND USE PLAN**  
**PROPOSED GENERAL LAND USE MAP**

**LEGEND**

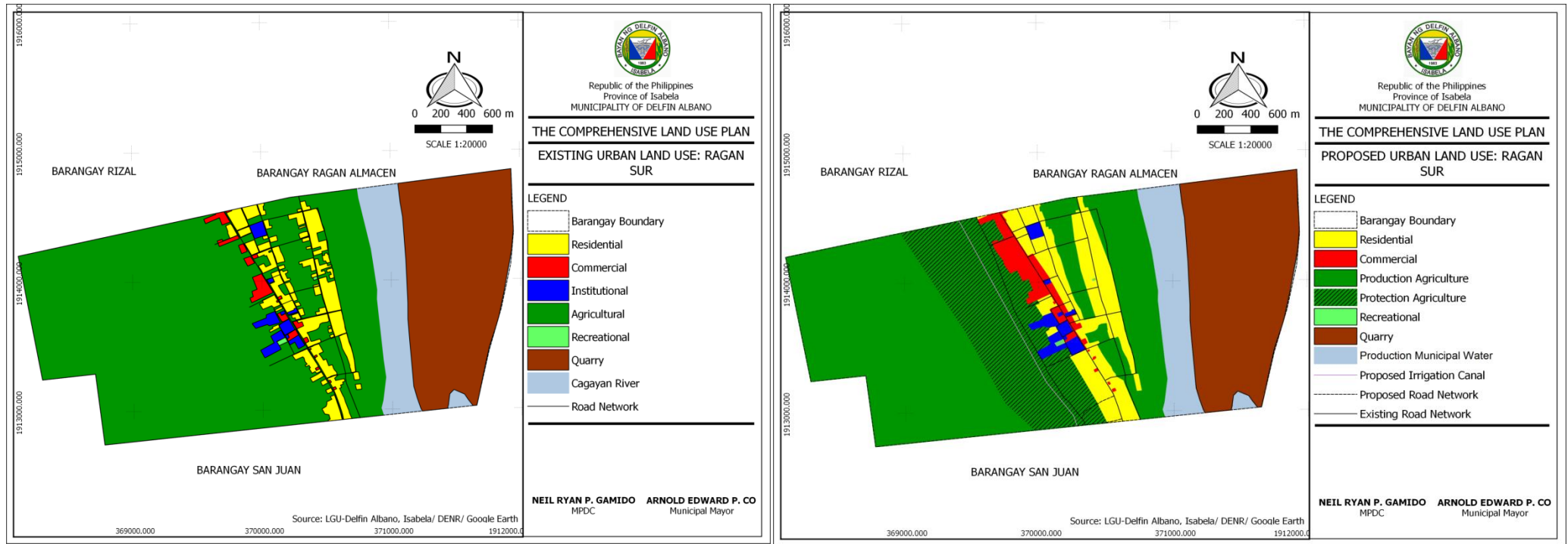
- Municipal Boundary
- Residential
- Commercial
- Institutional
- Industrial
- Production Agriculture for Corn
- Production Agriculture for Rice
- Protection Agriculture
- Protection Forest
- Protection Protection
- Recreational
- Memorial Parks
- Tourism
- Quarry
- Production Municipal Water
- Protection Municipal Water
- Creeks
- Existing Irrigation Canal
- Proposed Irrigation Canal
- Existing Road Network
- Proposed Road Network

Source: LGU Delfin Albano, Isabela/ DENR / Google Earth

**NEIL RYAN P. GAMIDO** **ARNOLD EDWARD P. CO**  
 MPDC Municipal Mayor

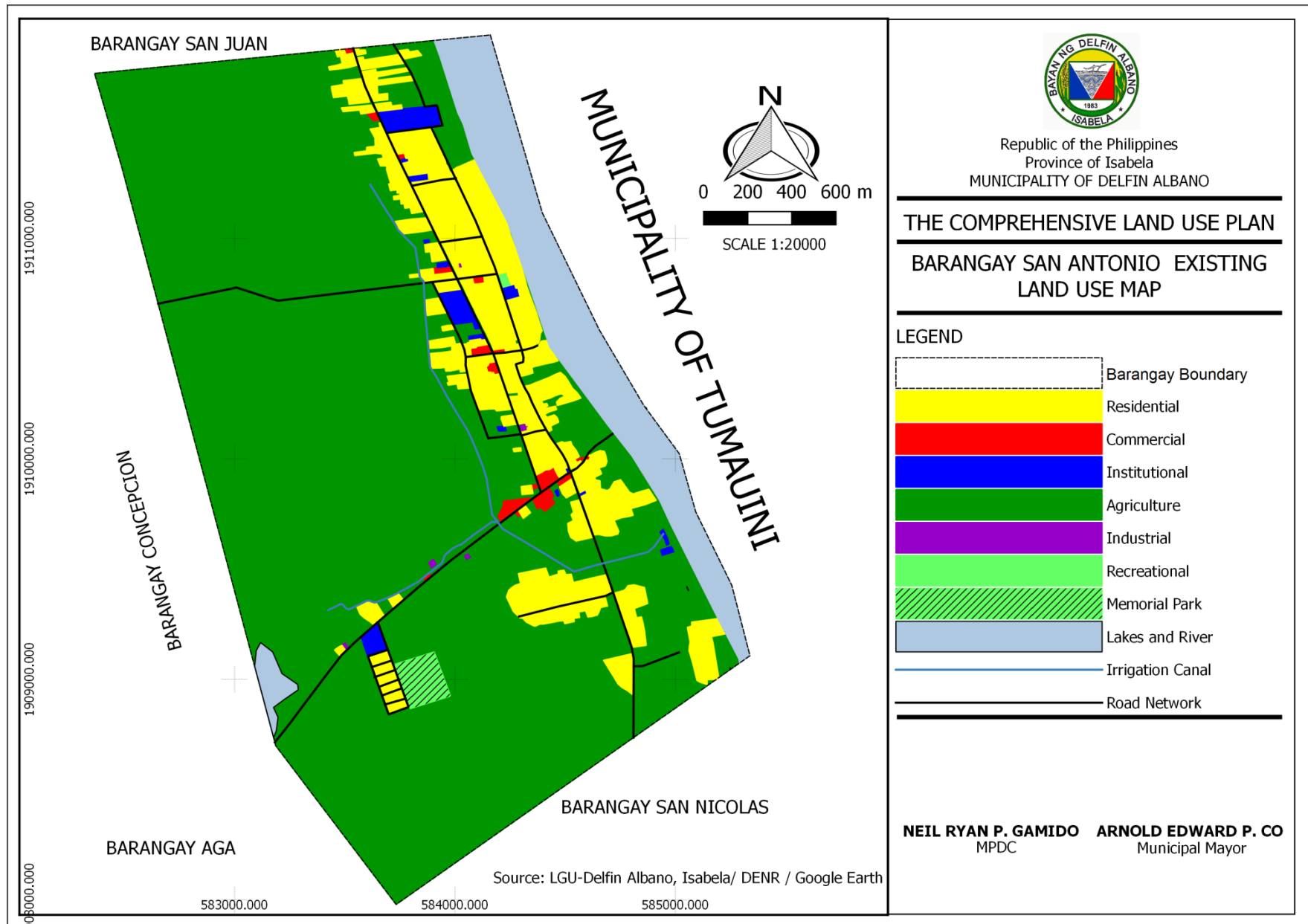
Land Uses	EXISTING		PROPOSED		DIFFERENCE (INCREASE/DECREASE)
	Area (Has.)	%	Area (Has.)	%	Area (Has.)
Residential	550.27	2.88%	938.49	4.91%	412.57
Commercial	12.89	0.07%	50.47	0.26%	37.58
Institutional	29.02	0.15%	30.46	0.16%	1.44
Industrial	1.12	0.01%	32.94	0.17%	31.82
Production Agriculture	12262.48	64.21%	11495.16	60.20%	-848.32
Protection Agriculture	103.69	0.54%	437.91	2.29%	334.22
Production Forest	704.09	3.69%	4316.83	22.61%	3612.74
Protection Forest	0	0.00%	868.8	4.55%	868.80
Grassland	4522.87	23.69%	0	0.00%	-4522.87
Recreational	2.07	0.01%	2.07	0.01%	0.00
Memorial Parks	7.9	0.04%	26.09	0.14%	18.19
Quarry	337.9	1.77%	337.9	1.77%	0.00
Tourism	6.6	0.03%	60.43	0.32%	53.83
Roads/Utilities	80.46	0.42%	104.81	0.54%	24.35
Lakes	128.66	0.67%	128.66	0.67%	0.00
River	344.67	1.81%	344.67	1.81%	0.00
<b>Total</b>	<b>19095.23</b>	<b>100.00%</b>	<b>19095.23</b>	<b>100.00%</b>	<b>0.00</b>

# URBAN LAND USE PLAN

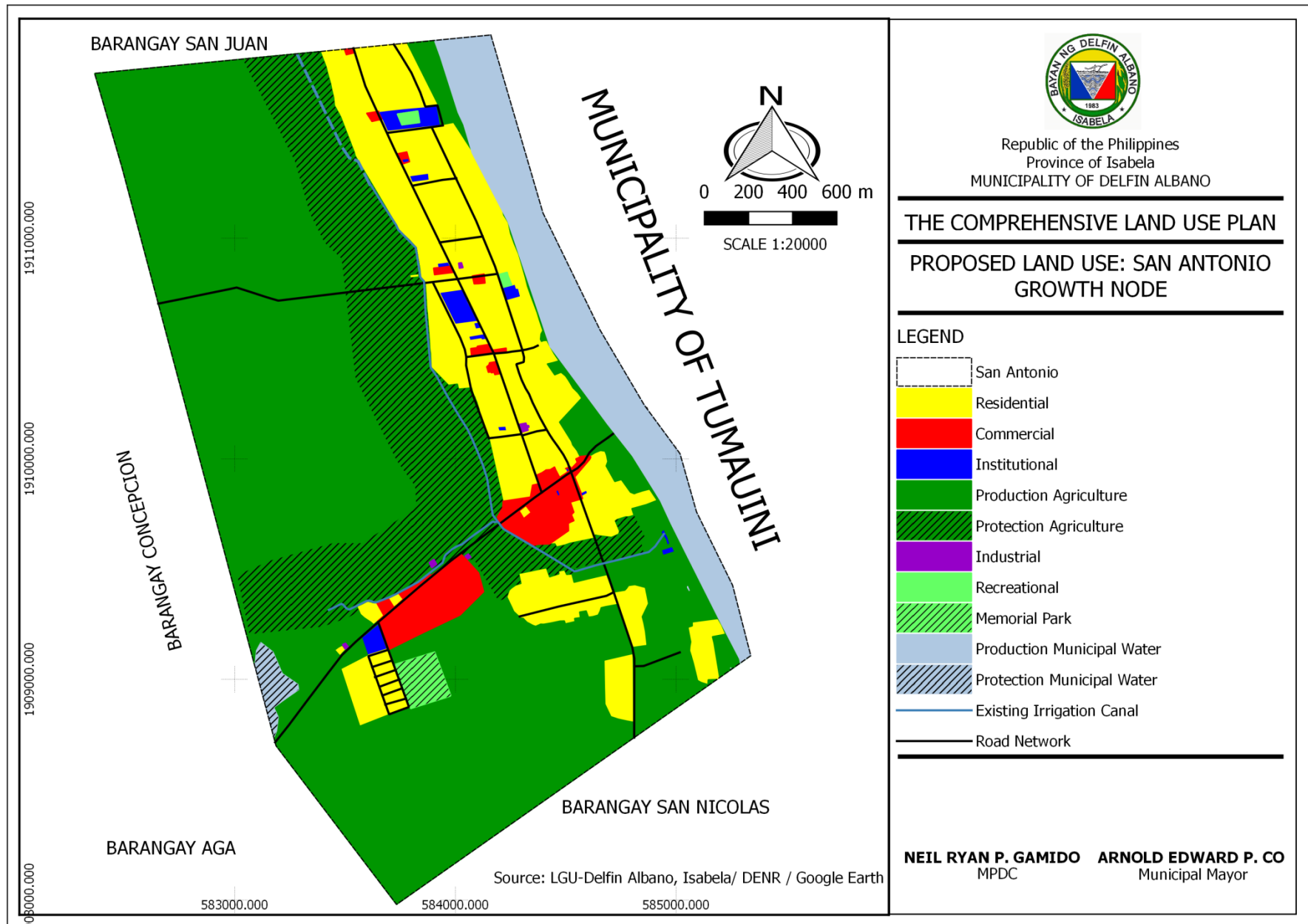


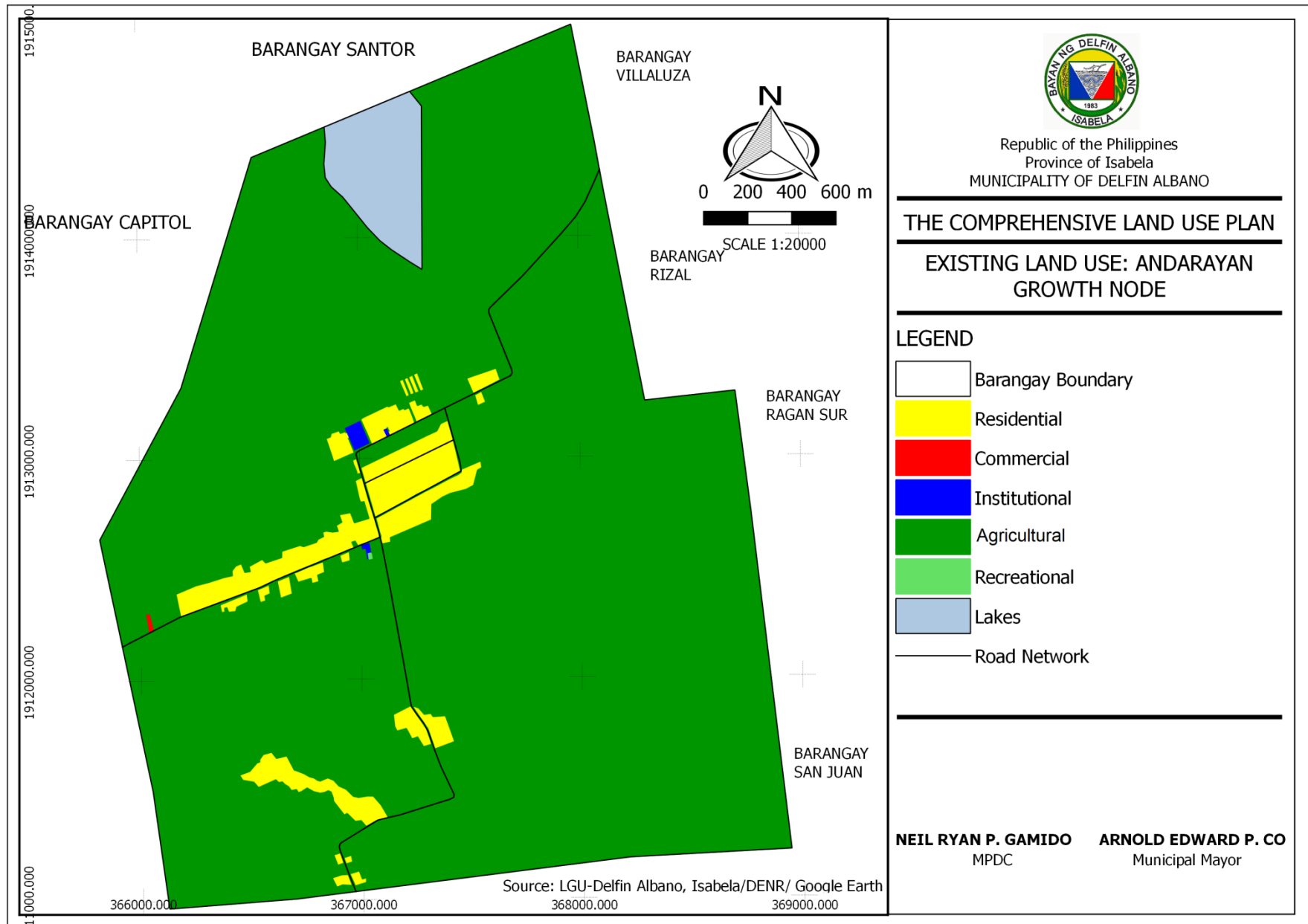
LAND USES	EXISTING LAND USE		PROPOSED LAND USE		DIFFERENCE
	Area (Has)	%	Area (Has)	%	Decrease/Increase
Residential	30.31	5.63%	52.18	8.79%	21.87
Commercial	5.82	0.98%	14.65	2.47%	8.83
Institutional	6.92	1.17%	6.92	1.17%	0
Industrial	0	0.00%	0	0.00%	0
Agriculture Production	370.11	62.88%	239.07	40.28%	-134.12
Agriculture Protection	0	0.00%	98.88	16.65%	98.88
Forest Production	0	0.00%	0	0.00%	0
Forest Protection	0	0.00%	0	0.00%	0
Grassland	0	0.00%	0	0.00%	0
Memorial Parks	0	0.00%	0	0.00%	0
Recreation	0.33	0.06%	0.33	0.06%	0
Quarry	127.31	21.45%	127.31	21.45%	0
Tourism	0	0.00%	0	0.00%	0
Roads/utilities	6.15	1.03%	7.62	1.28%	
Lakes	0	0.00%	0	0.00%	0
River	46.56	7.84%	46.56	7.84%	0
<b>Total</b>	<b>593.52</b>	<b>100.00%</b>	<b>593.52</b>	<b>100.00%</b>	<b>0</b>

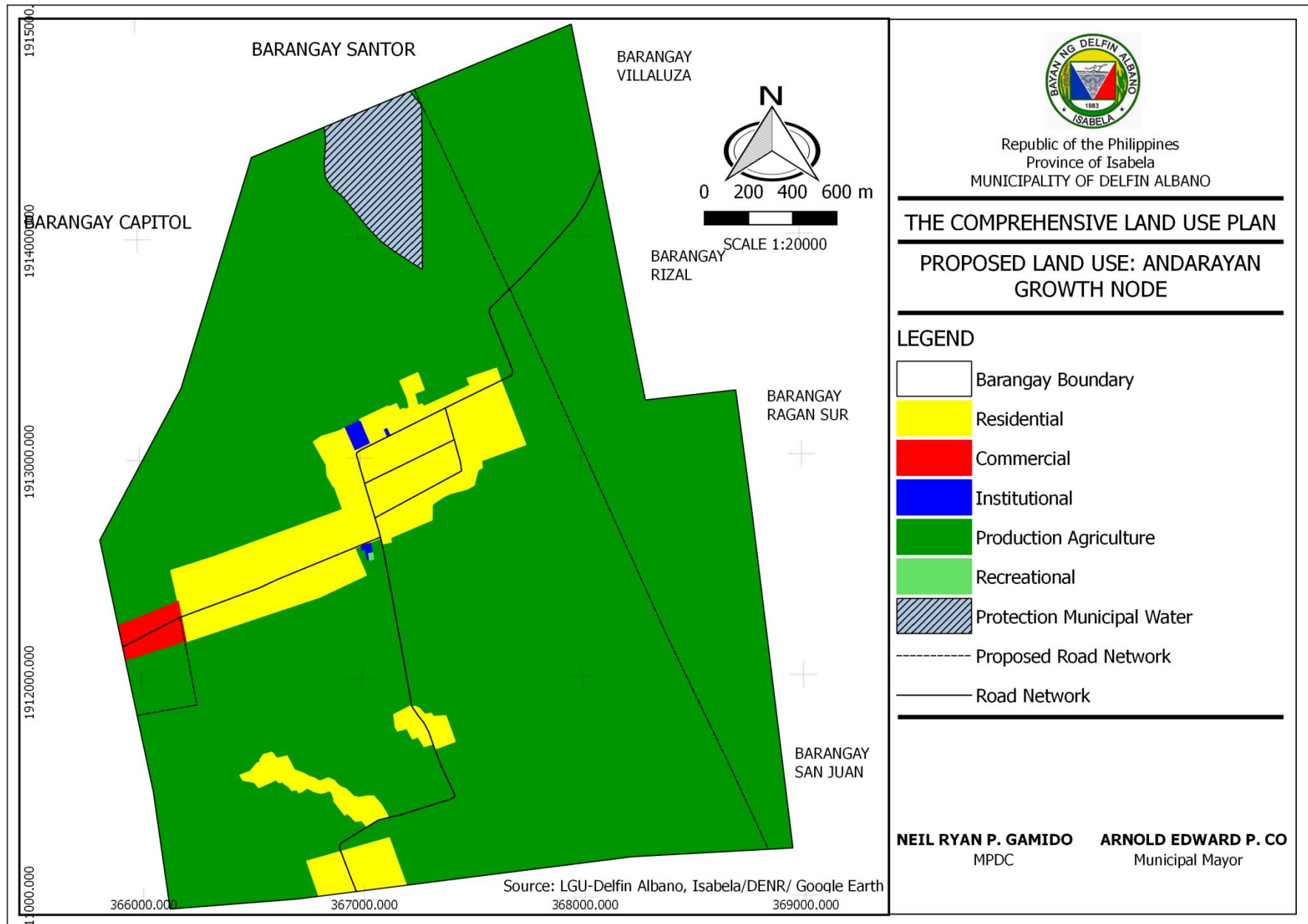
### URBAN LAND USE PLAN- Ragan Sur

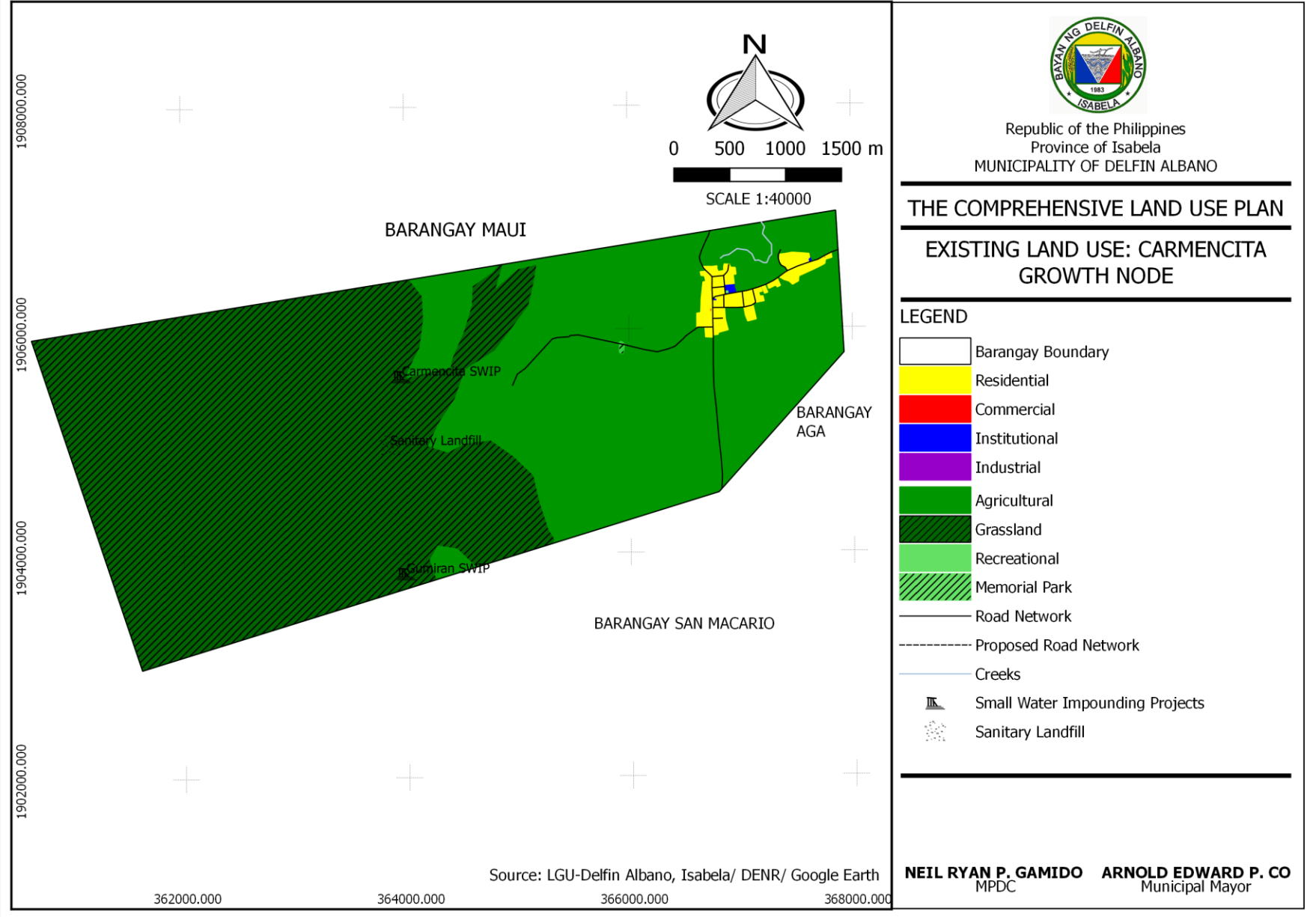


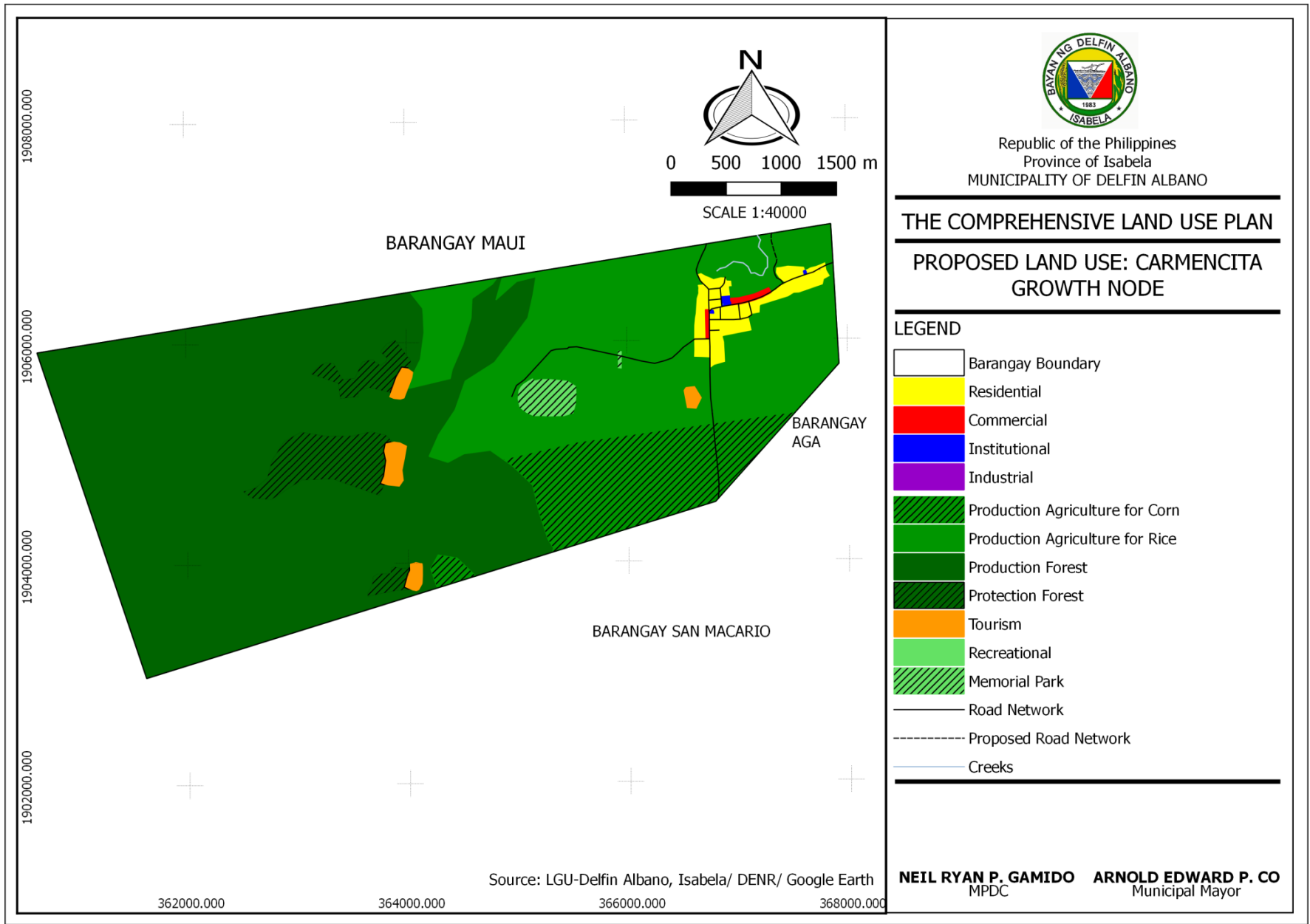


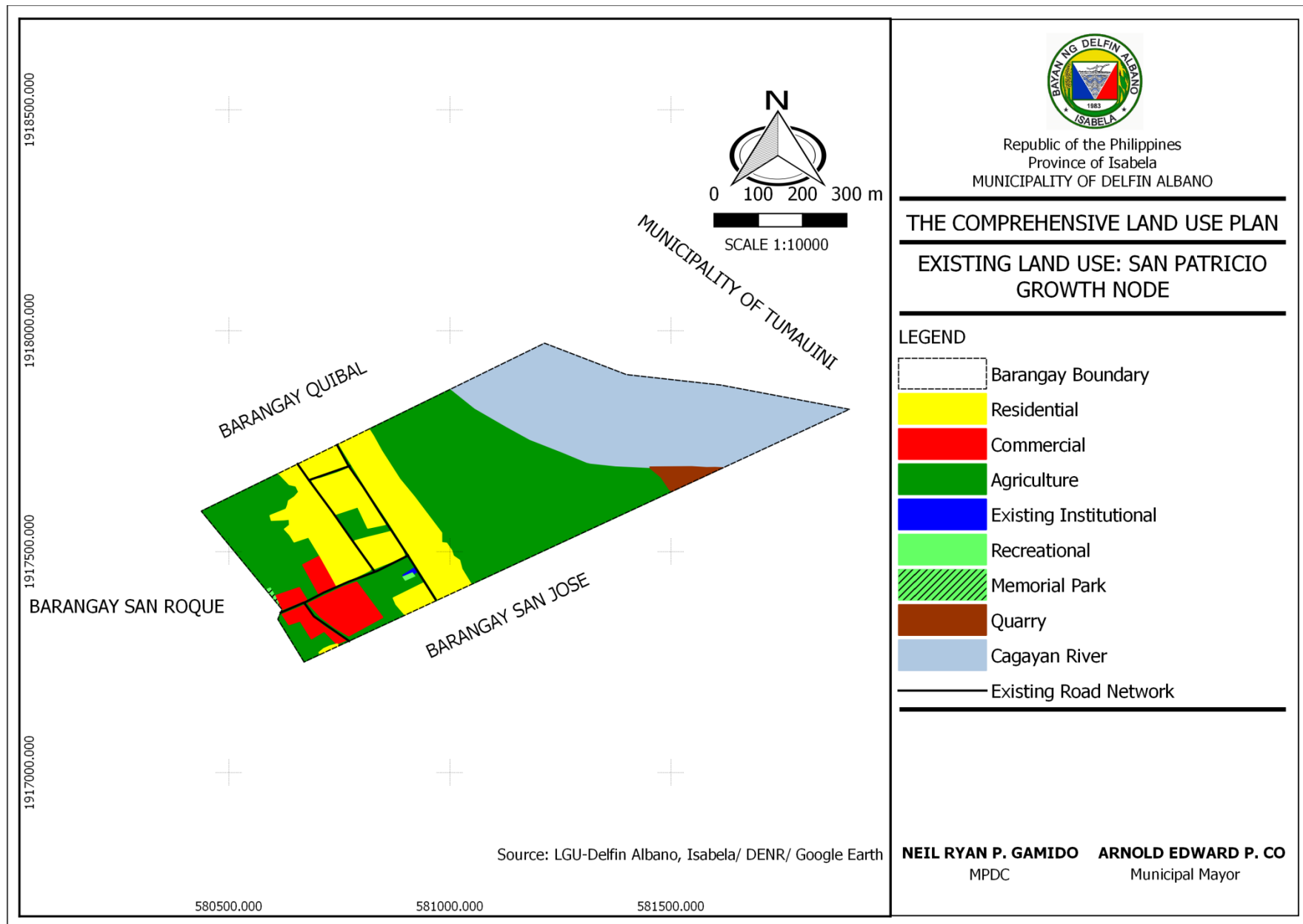


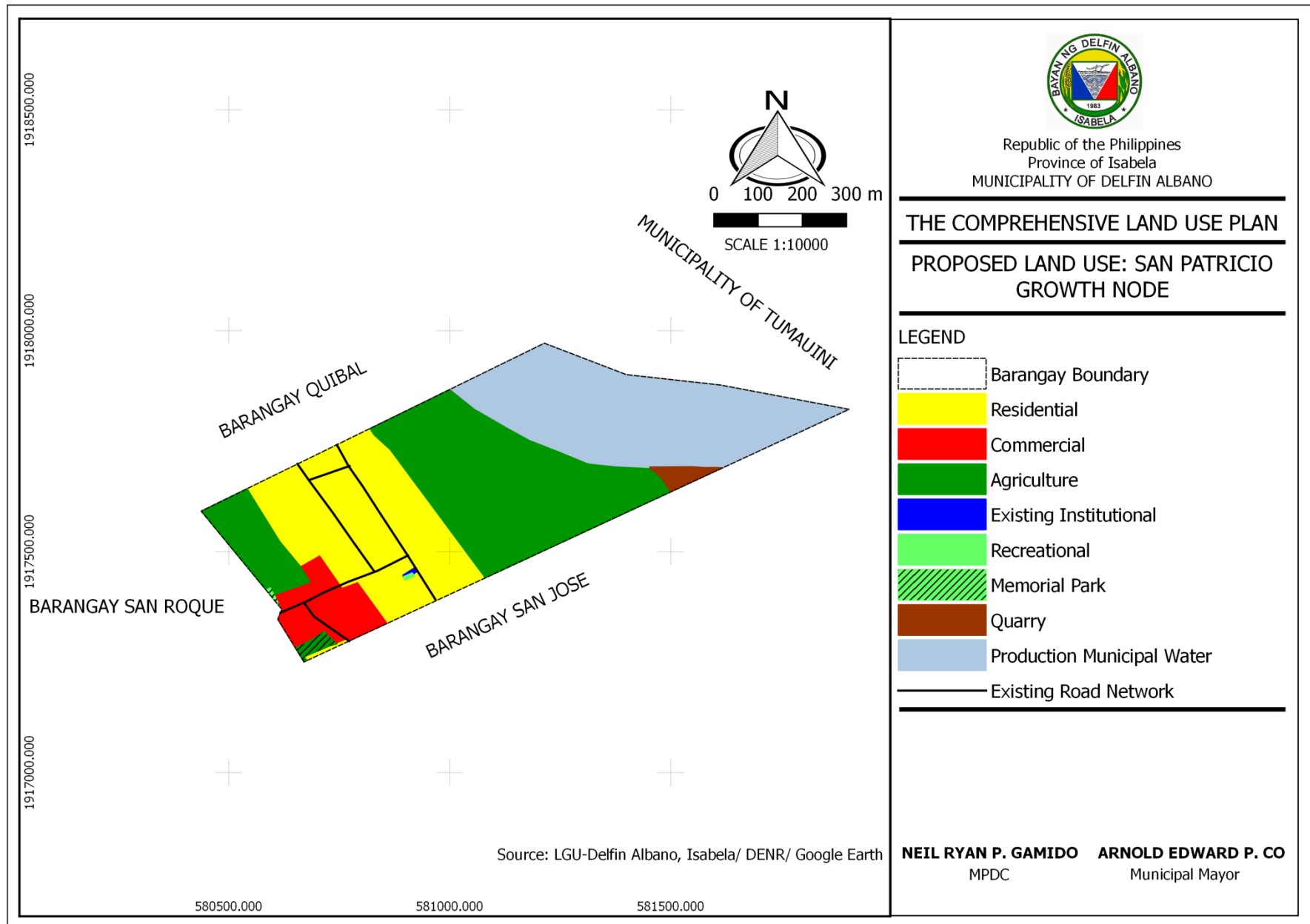












## **Land Use Policies**

### **On Settlements:**

1. Residential use shall enjoy priority over other uses in the allocation of hazard – free areas.
2. Hazard – exposed settlements both urban and rural shall be relocated to safe areas.
3. Vulnerable settlements that cannot be relocated shall have an operation community – based disaster management plan.
4. Multi-storey dwellings shall be sited in areas determined to be safe by engineering geological studies.
5. Regular monitoring and evaluation of structural quality of dwellings shall be established.

### **On Infrastructure:**

1. Follow design standards for safety.
2. Minimize exposure to geo-hydrological hazards.
3. Office and centers that need to be relocated must subject the site to intensive risk analysis.
4. Establish civil works that assist nature to rehabilitate itself or maintain its integrity.

### **On Production Areas:**

1. Industrial and commercial land use should be properly located in consideration of their traffic generation potential and pollution impact.
2. Strict zoning regulation shall be enforced on livestock, poultry and piggery houses located in residential areas.
3. Effects of agricultural chemical residues shall be monitored and regulated.
4. Environmental impact rather than potential revenue shall be the primary consideration in granting permits for small-scale mining and quarrying.
5. Tourism projects shall be evaluated equally for their income generation potentials as against the environmental degradation, displacement of local residents and moral corruption that usually accompany these projects.

### **On Protection Areas:**

1. Liberal allocation of open space in heavily populated areas shall be used as a vulnerability-reduction measure.



2. Encourage maintenance of greenery in public and private lots not only for amenities but for its carbon sequestration function.
3. Environmentally critical and hazardous areas shall be properly demarcated and buffered.

The ecological function shall be paramount over economic and other consideration when allowing the use of protected areas.

### **List of Priority Programs and Projects**

#### Social and Economic Sectors

- Resettlement of Informal Settler Families Occupying Danger Areas
- Establishment of Evacuation Centers as an Alternative to Using Schools as Evacuation Centers During Disasters
- Construction of socialized Housing Projects for Low/Middle-Income Groups
- Establishment of Ecoparks in Order to Promote a Healthy Lifestyle
- Construction of Secondary and Primary Level Health Infrastructure
- Allocate an Adequate Land Area for Expansion of Schools
- Construction of Protective Services Infrastructure
- Construction of the Following Social Welfare Facilities: Women and Children; CICL

Rehabilitation Center; Center for Street Children

#### Environment and Natural Resources Sector

- Capacity Building in Environment and Natural Resources
- Water Quality Management Project
- Air Quality Management
- Solid Waste Management System

#### Infrastructure and Utilities Sector

- Integrated Flood and Drainage System
- Small Water Impounding System
- Construction of Detention Ponds

#### Local Administration and Finance Sector

- Local Government Unit in Coordination with Department of Education (DepEd) School Districts and Division Offices for the DepEd School-to-School Partnership Arrangements

- Land Banking for Future Economic Development of Delfin Albano
- Regular Conduct of Community-Based Monitoring System
- Delineation of Barangay Boundaries
- Adoption and Mainstreaming of Green Technology