



Nevada Organic Phosphate Inc.

(NOP-CN)

Rapidly Moving the Exploration & Development Phases of
the Company's Murdock Mountain Critical Mineral
Phosphate Rock Project Forward as Regenerative Agriculture
& Organic Farming Demand for High Purity P_2O_5 Continues
to Grow Significantly

Research Report Update- September 20, 2025

Prepared by RAK Consultants CANADA Inc.

INVESTMENT HIGHLIGHTS

- Exploration permits now approved by both US Federal & State authorities- twelve separate drill sites planned
- Commencing exploratory drill work now and into the late fall on first sites
- Project area now expanded to over 33 square km (13 square miles) and strike of key phosphate bed extended to 29 km (18 miles)

BACKGROUND

Nevada Organic Phosphate is an early-stage critical mineral exploration company with a sedimentary rock phosphate property (the “Murdock Property”) hosting a nearly flat lying sedimentary bed of known phosphate mineralization in northeast Nevada. The increasing interest in organic and sustainable agriculture practices has contributed to the demand for organic fertilizers, including those derived from rock phosphate. Organic rock phosphate is often marketed as a fertilizer that not only provides phosphorus but also contributes to overall soil health & increased CO2 sequestration. **The Company aims to be one of the only certified organic rock phosphate producers with large scale potential in North America.** The Murdock Property is situated adjacent to a main highway and the rail head to California. The project was acquired by the Dow group in 2012 and has since become a publicly traded entity (see Figure 1) under the symbol “NOP” on the Canadian Securities Exchange (CSE).

Figure 1: Nevada Organic Phosphate Share Capital

Share Capital	
Unaudited as at July 13, 2025	
Total issued and outstanding common shares	69,899,305
Total options outstanding	6,475,000
Total warrants outstanding	27,194,600
Total issued and outstanding - Diluted	103,568,905

Figure 2: NOP Daily Stock Price Chart (latest 12-months)

Nevada Organic Phosphate Inc.



Charts by [TradingView](https://www.tradingview.com/)

Figure 3: Murdock Mountain Project Location

Blow it up... Dig it up... Grind it up...
Bag it up... and Ship it Out by Rail

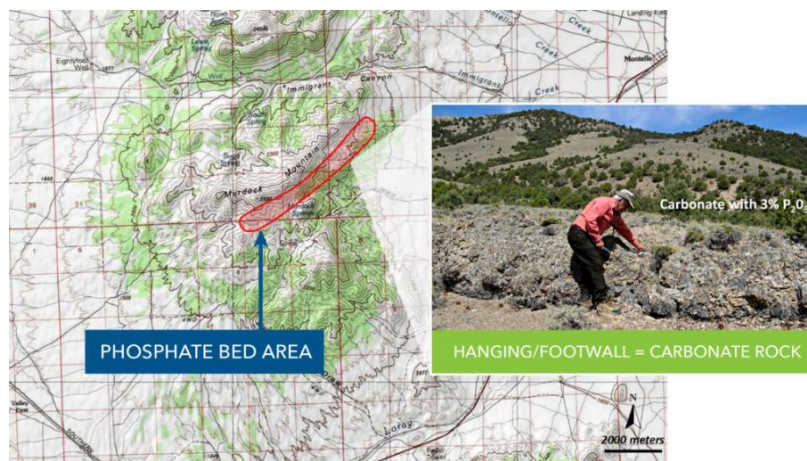
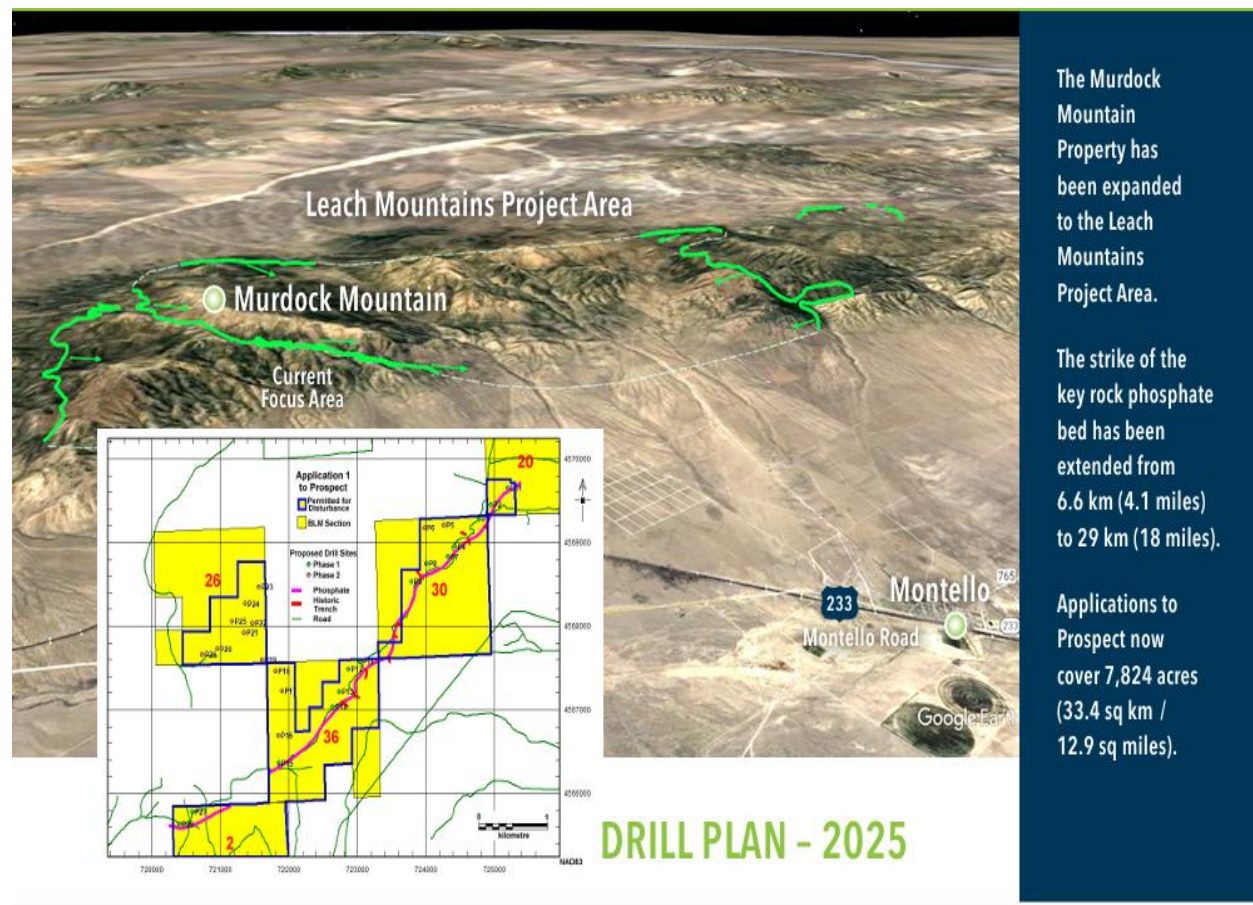


Figure 4: Murdock Mountain & Leech Mtn. Project Area (2025)



CORPORATE MILESTONES- Drill ready!

Since our previous report on the Company dated March 15, 2024 ([Nevada Organic Phosphate-Research Note-March15 2024-RAK \(final-1\)](#)), Nevada Organic Phosphate has been rapidly pushing its Murdock Mountain project in Nevada forward with the following milestones achieved:

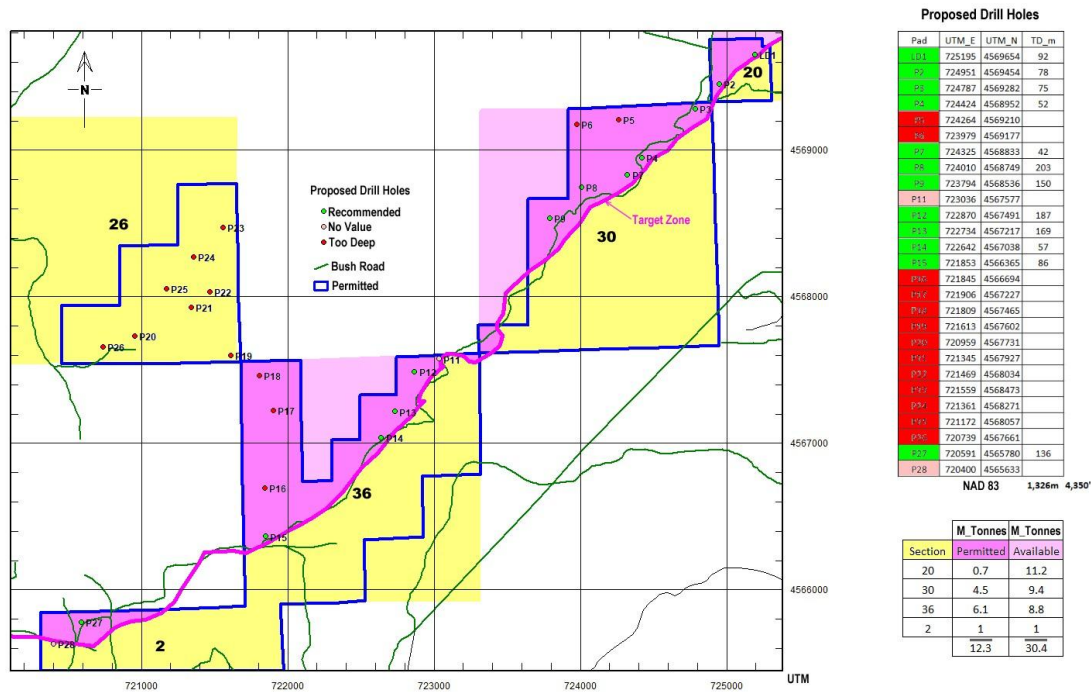
- **Positive Exploration Results:** Historical geological surveys have confirmed the presence of high-quality phosphate mineralization across several new target areas within the Murdock Property permit areas (see Figures 3 & 4). The strike length of the target phosphate zone at the Murdock Property has increased from approximately 6.6 to 33.4 kilometers.
- **Initial Resource Targets:** The initial 1,813-acre application is believed to host a potential Exploration Target Mineralization Inventory (ETMI) of 10 to 45 million

tonnes of rock phosphate, with a grade ranging from 3-15% P₂O₅. This estimate* is based on an average thickness of 3.5 meters and a specific gravity of 2.61.

- **Additional Resource Targets:** Three new applications covering an additional 6,011 acres have been added, bringing the total ETMI potential to 200-220 million tonnes of rock phosphate. *
- **Key regulatory steps have been completed:** In September of last year, NOP's wholly owned subsidiary Nevagro NV., was informed by the Bureau of Land Management (BLM) that they were authorizing the Murdock Mountain Phosphate Exploration Project after all studies and assessments had been completed and approved by both the Federal and State agencies. As the BLM completed its final reviews, and NOP also completed its Site Environmental Assessments & Sage Grouse Habitat Protection Assessments, the BLM then requested that company pay the prerequisite Reclamation Bond so that NOP could commence its planned exploration drilling program in the spring of 2025. This was done in October of 2024.
- **Drill Program Is Ready to Commence:** The Company's planned drilling program for the fall of 2024 was delayed by the BLM administrative permit signing process being completed a week before the sage grouse habitat timing restrictions expired on November 1, 2024, as the operating window for the originally planned 2024 drill program was closed. However, **the necessary Phosphate Exploration Permit has now been issued by the BLM, so actual drilling is now planned on the main phosphate target zones for 3Q-2025** (see detailed drill plan map-Figure 5). The proposed 1,400-meter (minimum) drill program will be made up of approximately 12 large diameter (HQ) diamond drill holes, widely spaced, targeting depths between 100 and 250 meters across the focus area of the Exploration Permit and adjacent to existing bush roads (to save on road building costs and to minimize site & habitat disturbance). Access improvements, including grading of the 6.6 km existing trail, will facilitate logistical ease and efficiency throughout the drill campaign. Drilling contracts are currently being finalized.

** These estimates are conceptual in nature and have not been verified by NOP according to current 43-101 standards of disclosure. Further exploration is required to define a mineral resource. It's important to note that these figures are based on previous workers' estimates and geological models, and further exploration will be necessary to confirm these potential resources.*

Figure 5: Detailed Drill Plan Map for the Murdock Mtn. Focus Area (3Q:2025)

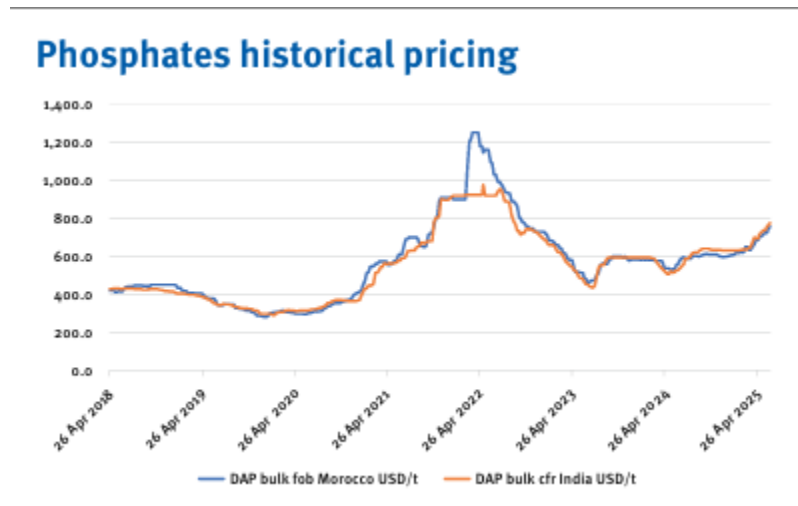


- **Sustainable Practices to Continue:** In line with the Company's commitment to environmentally responsible mining, its exploration timeline has been carefully revised to comply with all local environmental regulations, including protection of the local sage grouse populations and water conservation measures.
- **Substantial Fundraising Completed:** Over the course of the last 24 months, the Company has raised over C\$815k for the project and has financed the complete permitting and environmental assessment processes as well as all working capital required to proceed with its drilling program which is to commence shortly. Since January 2022, NOP has raised just over C\$2 million to finance all of its activities.

CHEMICAL vs. ORGANIC FERTILIZER MARKET OUTLOOK- Regenerative Ag boosting organics

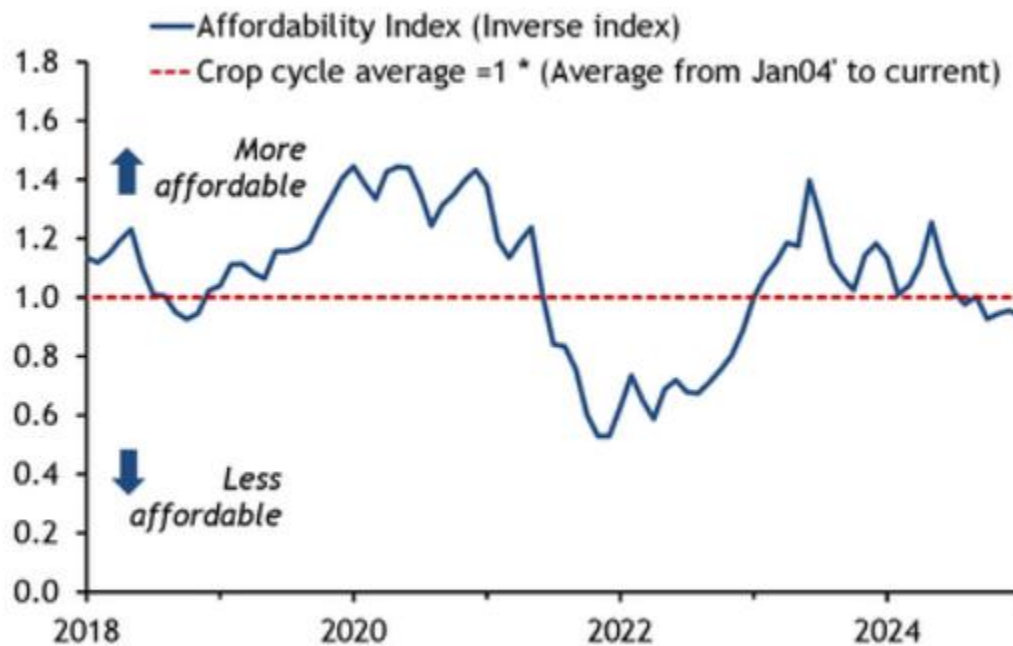
- Markets are in flux with chemical fertilizers, used in traditional mass farming methods, seeing softening demand because of declining crop prices. Yet, because of their rising input costs and tariff implications, this has started to impact prices upwards (see Figure 6), which are reducing farmers' profit margins even more.

Figure 6: Phosphate pricing- Chemical DAP (Argus-Aug 2025)



- Global affordability for fertilizers has dropped to its lowest in nearly three years because of this sustained increase in fertilizer prices, while crop values have dipped to the lowest since September 2020. Nutrient affordability fell to 0.75 points in June 2025, the lowest since September 2022, according to Argus data ([FER-eBook-Fertilizer-Focus-Magazine.pdf](#)-Aug2025). The affordability index (see Figure 7) — comprising a fertilizer/ crop price index — above 1.0 indicates that fertilizers are more affordable compared with the base year set in 2004. An index below 1.0 indicates lower nutrient affordability. The fertilizer index fell in June of this year owing to higher fertilizer prices for phosphates while an increase in urea prices in June added further support to the index. The Israel-Iran conflict of early 2025 firmed market sentiment across all nutrients in June, which has also added some volatility to freight rates. Phosphate prices saw the largest gains, with June prices at the highest since September 2022 on persistent demand from India in the absence of inflows of Chinese DAP supply.

Figure 7: Global Fertilizer Affordability Index (Argus & World Bank-2025)



- Traditional fertilizers, though effective in boosting short-medium term yields, suffer from inefficiencies such as nutrient leaching, volatilization, and surface runoff, which lead to environmental degradation and reduced productivity. In response to these challenges, the European Union and Japan have set ambitious goals to reduce fertilizer usage by 20% by 2030, highlighting the need for more sustainable fertilizer technologies.
- **Regenerative agriculture+** is expanding worldwide as farmers seek lower cost alternatives to chemical fertilizers (such as organic ones) that are harming the long-term health of their soils ([Gabe Brown: How regenerative agriculture brings life back to the land | TED Talk](#)) and nutrient uptake by their crops ([FER-eBook-Fertilizer-Focus-Magazine.pdf](#)-see pages 52-52). The global regenerative agriculture market size was valued at USD 12.66 billion in 2024. It is projected to reach USD 57.16 billion by 2033, growing at a CAGR of 18.7% from 2025 to 2033. The rise in support from governments, organizations, farmer welfare associations and consumers drives the regenerative agriculture market ([Regenerative Agriculture Market Size | Industry Report, 2033](#)- Grand View Research) and is growing worldwide quickly.

+**Regenerative agriculture** is a [conservation](#) and rehabilitation approach to food and farming systems. It focuses on [topsoil regeneration](#), increasing [biodiversity](#),^[1] improving the [water cycle](#), enhancing [ecosystem services](#), supporting bio sequestration, increasing [resilience to climate change](#), and strengthening the health and vitality of *

- Certified Organic Fertilizer demand is being driven specifically by the adoption and conversion of organic food production ([Organic farms in the US | Majority of US farmers switch to organic farms](#)) & regen ag across the globe, but no where with more strength than in Europe and North America with support from a host of NGOs, USDA and private equity funding programs ([Mad Capital Secures \\$78M Amid Demand for Regenerative Ag](#)). Many farmers that convert from traditional farming methods to organic/regen ag are also being compensated outright for doing so ([Eco-Harvest – ESMC](#)).
- The regenerative agriculture market size in North America alone was valued at USD 11.17 billion in 2024. It is projected to grow from USD 12.70 billion in 2025 to USD 41.31 billion by 2034, exhibiting a CAGR of 14.0% during 2025–2034 (see Figures 8 & 9; [Regenerative Agriculture Market Size Share & Growth Overview 2034](#) - Polaris).
- Large food corporations such as PepsiCo, Cargill, Unilever, Nestle, Bunge, Louis Dreyfus Co., Bayer and McCain Foods are rapidly gearing up their push to source their food/plant ingredient supplies from regenerative farms and are investing heavily in establishing or converting more acreage to do so. For instance, Cargill has stated that it will support its commitment to advance regen ag on 10 million acres of North American farmland and provide training on sustainable ag practices and improve access to markets for 10 million farmers by 2030 ([Regenerative agriculture for sustainable growth | Cargill](#)).
- Regenerative agriculture is now also a critical part of the solution for fighting **climate change** according to Bayer Global Ag Systems. The way humanity feeds itself globally accounts for anywhere between a quarter to a third of global greenhouse gas emissions. But what makes agriculture so unique is that it is not only a contributor today to the planet's greenhouse gas profile, but it actually has the potential to be a solution using regen ag ([Regenerative Agriculture | Bayer Global](#)).

Figure 8: Regenerative Agriculture- Market Share & Growth (to 2034)

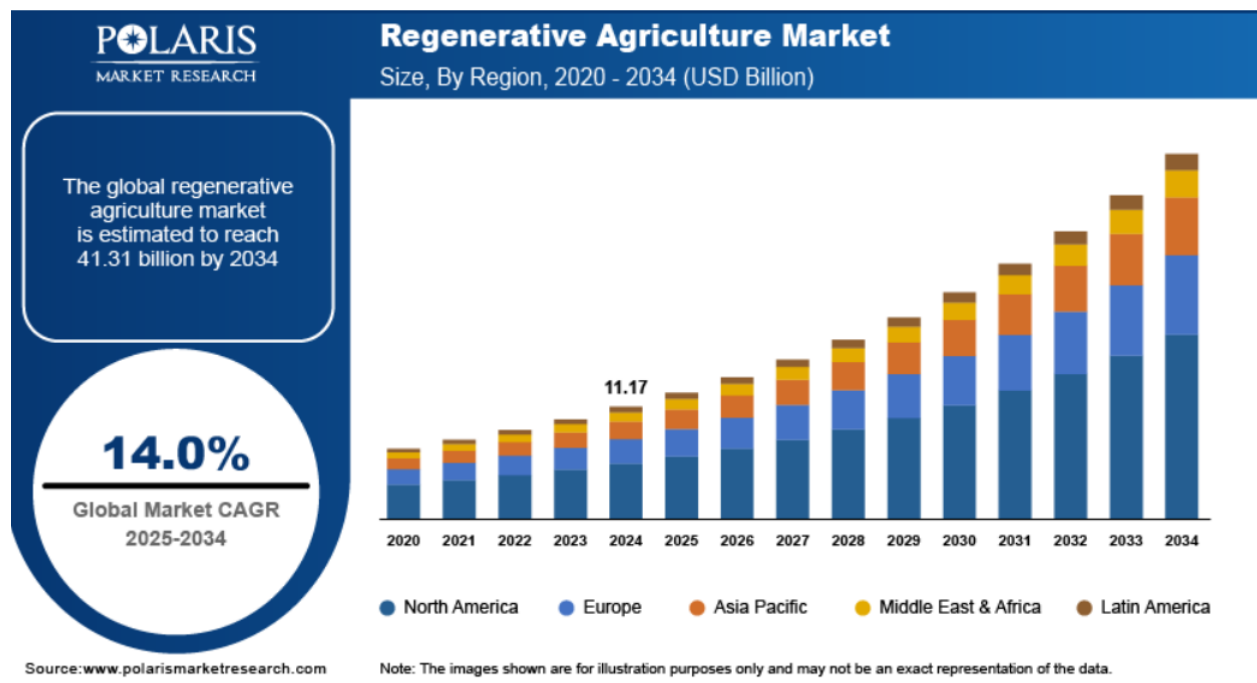
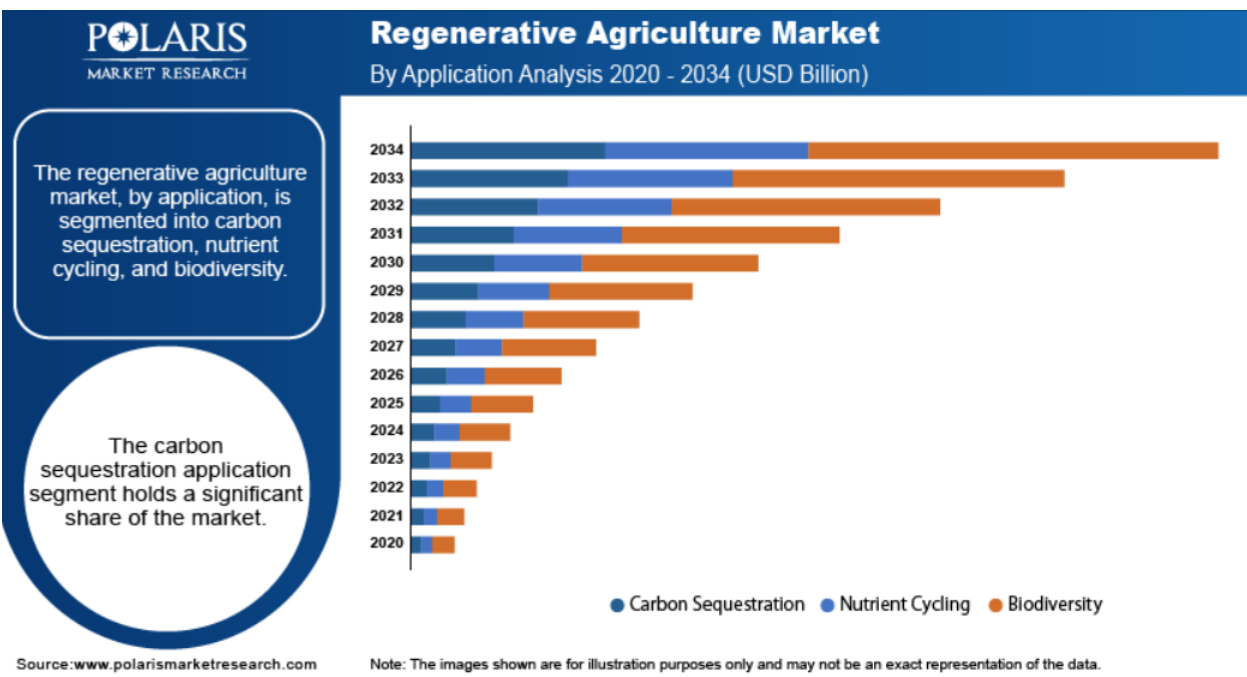


Figure 9: Regenerative Ag Market- By Application (2020-2024)



ORGANIC PHOSPHATE ROCK MARKETS- strong demand growth means higher prices

Rock phosphate applications establish a long-term supply of phosphorus in the soil by releasing its total phosphorus slowly over the course of a few years. It can also be a significant source of calcium. As one of the soil's and plant's most important nutrients, it provides the following:

- supports healthy development of plant fruits & flowers
 - is essential for biologically active soil and healthy plant development
 - helps prevent calcium deficiency in soil
 - supports beneficial soil microbes
 - aids in water uptake and provides drought resistance
 - provides better carbon capture in the soil
-
- The global phosphate rock market, valued at USD 6.5 billion in 2024, is forecasted to grow consistently, reaching USD 6.52 billion in 2025 and ultimately hitting USD 6.67 billion by 2033 and US\$8 billion by 2035, at a steady CAGR of 2.3% from 2025 to 2035. [Phosphate Rock Market Size & Forecast \[2035\]](#).
 - As farmers rapidly move towards more regenerative ag practices, convert more acreage to regen ag and reduce their reliance on chemical fertilizers, herbicides & pesticides, the soil still needs some assistance in improving crop yields over time vs. what nature can provide. Not only does rock phosphate improve plant nutrient uptake, improve soil health, accelerates water uptake and hence aids in soil water conservation, it also provides climate change benefits in allowing for increased carbon sequestration by allowing the soil to absorb & retain more CO2 than under traditional farming methodologies ([Farmers Achieve Lower Carbon Emissions with the Help of a New Regenerative Agriculture Collaboration in Europe](#)).
 - The market for truly certified organic produce- both for field crops and cash crops- is growing exponentially, even with current food price inflation. The Economic Research Office of the US Department of Agriculture estimates that the market for organic foods in the US alone is US\$120 billion (2020 data, pre-Covid) and is estimating it to grow at a rate of 8-9% per year from 2021-2027, and with huge economic and soil benefits ([The Economics of Regenerative Agriculture : USDA ARS](#)). Stellar Market Research is forecasting a 13.5% CAGR over the 2024-2032 period (see Figure 10).

Figure 10: Size of Organic Foods Market in North America & Forecast (2024-2032)



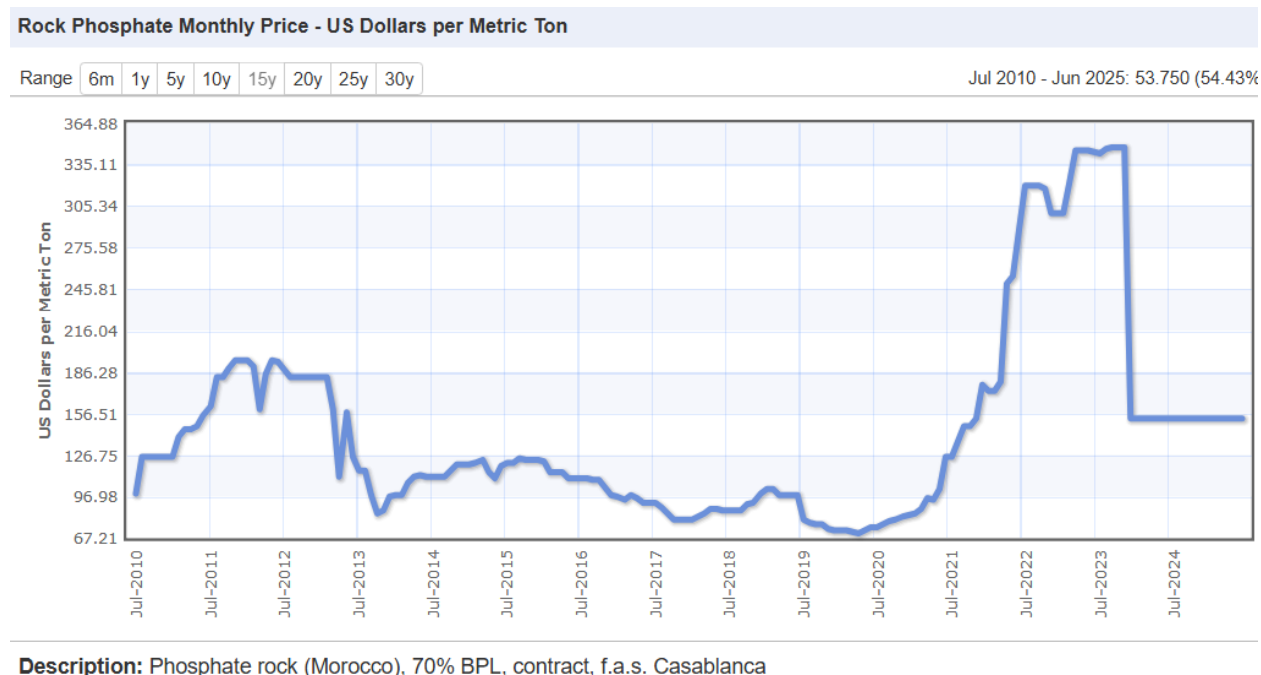
- Legislation was billed in the US Congress in the fall of 2023 (The Continuous Improvement and Accountability in Organic Standards Act-CIAO) that would amend the Organic Foods Production Act of 1990 to provide a streamlined and predictable process to review and revise organic standards implemented by the US Department of Agriculture. Nevada Organic Phosphate is working to achieve the “Organic Certification Seal” of the Organic Materials Review Institute (OMRI), one of the most trusted organic labels in the world (Figure 11). NOP will strive to achieve this label.

Figure 11. Organic Certification Seal-OMRI (www.omri.org)



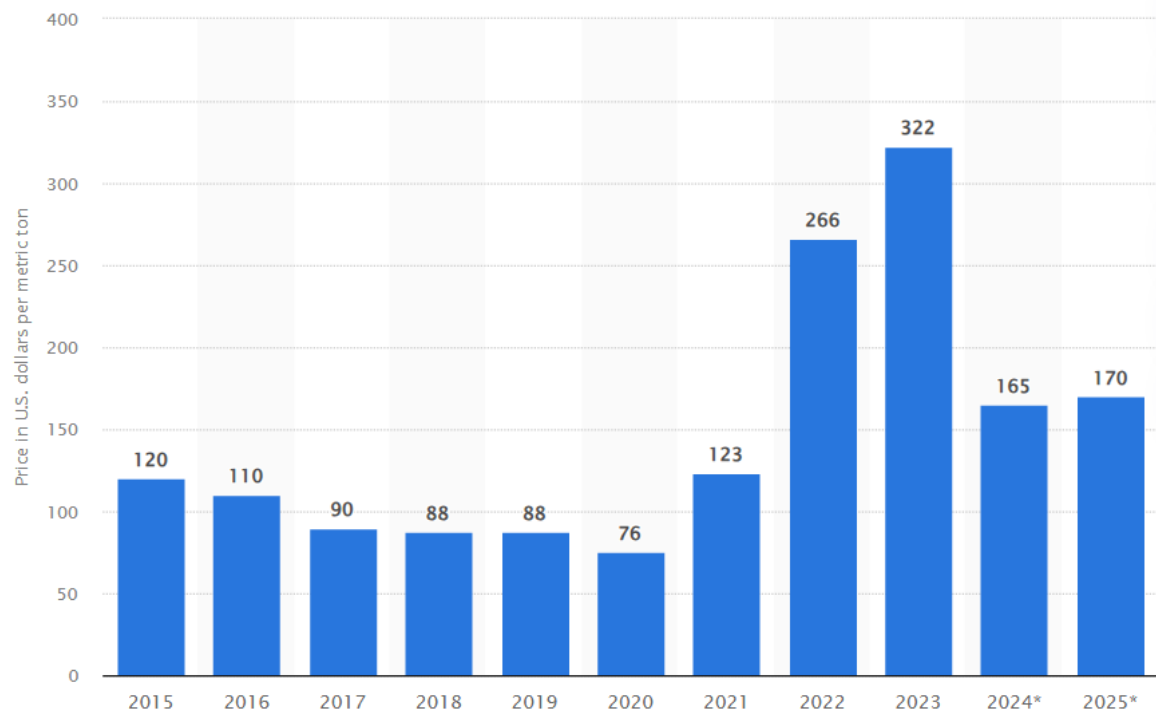
PHOSPHATE ROCK PRICES- Slow & steady wins the race & back above historical norms

Figure 12: Rock Phosphate Prices- US\$/tonne (World Bank)



- Phosphate rock prices had a strong run during the 2021-2024 period, as COVID restrictions, inventory drawdowns, and supply chain/shipping bottlenecks were the norm.
- Since supply has come back to more normalized levels, prices have fallen from a high of US\$335/tonne to just over US\$150/tonne, which is still well above its 15-year average of US\$98.50/tonne.
- We estimate that prices over the short-medium term will stay above the current US\$ 155/tonne level and move upwards towards the US\$ 175/tonne mark into 2026, by virtue of limited supply and increasing demand (see Figure12).

Figure 13: Forecasted Phosphate Rock Prices (2024-2025)-\$US/Tonne; FAS Morocco



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- For local farmers and gardeners, prices for phosphate rock are holding up extremely well and have been seen on websites and gardening centers (see Figure 13) selling for retail prices of US\$ 40-45/kg (which translates into US\$ 40,000-45,000 per tonne!) The Company estimates it might realize a range of US\$250-450/tonne in prices from area regenerative/organic farmers and distributors for its 3-15% P₂O₅ bulk product (see Figure 14).

Figure 14: Retail Packaging of Organic Rock Phosphate (source: Esty Marketplace).

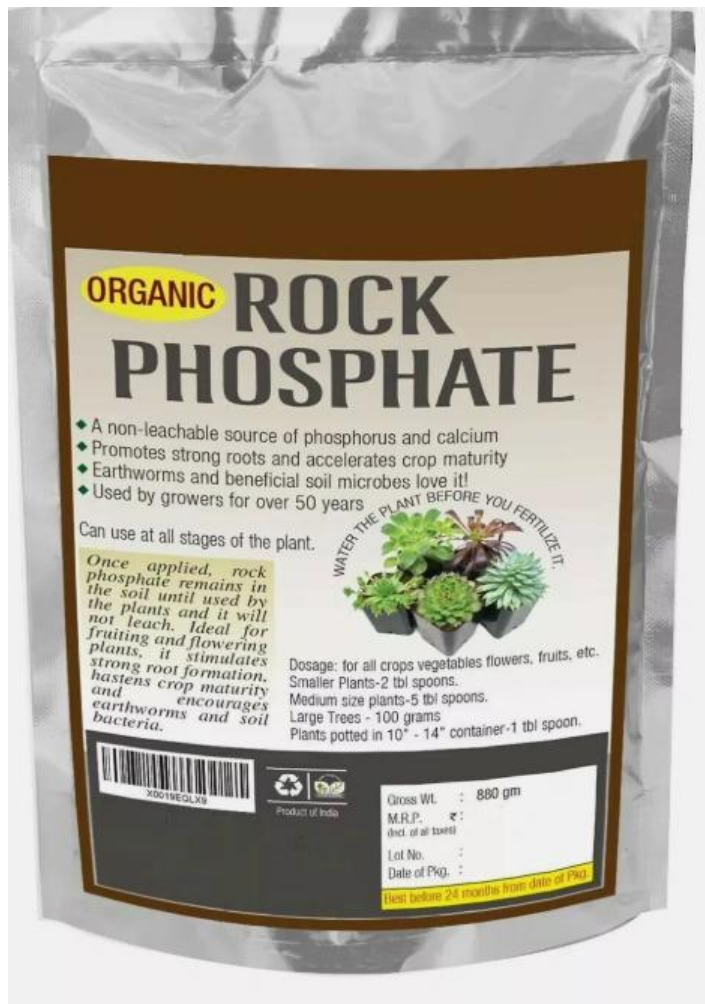


Figure 15: Bulk Packaging for Rock Phosphate (Source: Company website)



NEXT STEPS & UPCOMING CATALYSTS- Drilling to Start!


- The Company is “drill ready” with a detailed drill plan (see Figure 5), including 12 large diameter drill holes (no trenching) planned to encompass a total of 1400 meters of core material (as a minimum), targeting depths of 100 to 250meters. The program will commence shortly as the Company has now received its long-awaited and long overdue Exploration Permit timetable change in writing from the BLM, which was agreed to by the Nevada Department of Wildlife (NDOW) just recently (this past June).

- The program's purpose will be multi-faceted: 1) to establish the degree of P2O5 grade variability within the phosphate beds; 2) confirm the dip, thickness and continuity of the beds, so that underground mining is a possibility and 3) confirm that the low heavy metal & contaminant content, previously indicated by assays of outcrop samples, is consistently at those levels.
- Once the drill samples are analyzed & released publicly, it will be determined if the Company needs to further expand its resource footprint by adding additional drill sites (12 or more) along the outcropping phosphorite beds, as indicated in Figure 4 in the Murdock and Leech Mtn. strike areas (see the bed trace delineation in green).
- While not guaranteed, and if the first set of drill results warrant it, a NI-43-101 Resource Estimate may be generated by the company sometime by early to mid 2026. If all goes well, a sizeable resource estimate could provide the company with the impetus to draw up resource extraction plans and issue a Preliminary Economic Assessment (PEA) soon thereafter. This would be a game-changer for the company and could allow it to proceed with further resource size determination and quality of the rock phosphate suitability for organic certification. **Please Note:** *These estimates are conceptual in nature and have not been verified by NOP according to current 43-101 standards of disclosure. Further exploration is required to define a mineral resource. It's important to note that these figures are based on previous workers' estimates and geological models, and further exploration will be necessary to confirm these potential resources.*

PEER GROUP COMPARISON- Not yet reflecting NOP's immense potential

- As shown in Figure 16, the Company's share price, and its market cap levels have yet to reflect its possible investment potential or the unqualified estimated size of its P2O5 deposit and related business opportunity. This is understandable given the early stages of its development and lack of a qualified NI-43-101 Resource Estimate, which the company is rapidly moving towards completing.
- However, since we still await an official NI 43-101 resource estimate, it would be premature to comment on any broad analysis of the Company's intrinsic value, so we will not assign any valuation parameters or targets to the Company at this time.

Figure 16: Peer Group Comparison- NOP vs Phosphate Exploration Juniors

COMPANY	SYMBOL	SHARES O/S MIL	MARKET* PRICE 09/03/25	MARKET CAP MIL	PRODUCT	EST TIME TO PRODUCTION	EST CAPEX
FIRST PHOSPHATE	PHOS	120	\$0.475	\$51	PHOS ACID	EST 2030?	\$1.5 BIL
ARRIANNE	DAN	213	\$0.15	\$32	PHOS ACID	EST 2030?	\$1.5 BIL+
FOX RIVER	FOX	79	\$0.51	\$35	P MAP	CURRENT	
CHATHAM	NZP	109	\$0.05	\$4.3	P	EST 2027	\$100Mil
VERDE	NPK	56	\$0.46	\$31	K.P	CURRENT	
ITAFOS	IFOS	186	\$2.92	\$554	MAP/DAP	CURRENT	
 NEVADA	NOP	70	\$0.045	\$3.1	ORG.P	EST 2025	

Sources: TSXV, Company Disclosure Filings, Public Research Reports

INVESTMENT THESIS- Compelling early-stage critical minerals development opportunity

- Nevada Organic Phosphate is an early-stage critical mineral development opportunity that checks all the boxes for a compelling & unique investment in the rapidly growing regenerative agriculture and organic food sectors. In June of last year, Canada included phosphate on its Critical Minerals List. The US Department of the Interior has proposed the same for phosphate & potash ([World Critical Metals Outlook 2025](#)).
- Since the Company's high purity rock phosphate works in concert with natural soil bacteria & microbes, their product also accelerates carbon capture, water conservation and better plant health, which aligns perfectly with the core principles of regenerative ag and organic food growing practices.
- As the Company's product contains no heavy metals or contaminants and doesn't require chemical beneficiation (like other North American and Western Saharan sedimentary deposits that are the core inputs for MAP & DAP fertilizers and lead to algae blooms in lakes, rivers & oceans), it complies with environmental standards and sustainability goals on a global basis.

- To develop the project to full production of 100-200k tonnes/year of rock phosphate fertilizer, the Company will likely need minimal capex of C\$3-5 million in start-up capital (our estimate). They will likely also be able to use seam mining (if the sedimentary beds are fairly shallow and continuous) which will reduce operating costs/tonne significantly on site (internal Company estimate of US\$ 50-75/tonne). Add an additional US\$25/tonne for crushing, bagging and loading onto rail cars at the rail line near Montello, NV. (which is only 6 km down the Murdock Mountain Road), would bring our estimated overall operating costs/tonne to come in around US\$75-100/tonne; FOB Montello. With wholesale rock phosphate (P2O5 @ 20-30%) prices currently advertised (at time of writing) at US\$ 1500-2000 tonne (delivered California- [Wholesale Fertilizer, Phosphate Fertilizer, Rock Phosphate \\$1500 | Globalsources.com](https://www.globalsources.com/Wholesale-Fertilizer-Phosphate-Fertilizer-Rock-Phosphate-$1500/)), the Company should be able to reap significant margins for their product, even if cost estimates on the high side are realized (**Please note: these estimates are conceptual in nature only and are not based on any official NI-43-101 disclosure requirements**).
- NOP's product & business model is extremely simple: break it up, dig it up, grind it up, bag it up and ship it out....to farmers in the Pacific NW and across North America... who can receive the bulk bags, open them and apply NOP's crushed P2O5 rock directly onto their soils... with the added bonus of an 8-10 year, "slow release" life span.
- Senior management is fully committed to getting the Murdock Mountain project off the ground and with all their work now done to arrive at the "Drill Ready" stage, we are of the opinion that this well-seasoned group will see the project through to successful fruition for investors as swiftly as possible.

RECOMMENDATION- Strategic play on rare high-purity P2O5 demand & Regenerative/Organic Agriculture Acreage Growth

- We have been following this story for 3 years and are extremely impressed with the Company's and management's progress so far, even in the face of COVID restrictions, difficult capital markets conditions for junior explorers, as well as numerous BLM administrative delays.
- With drilling now ready to begin and the leased land mass significantly expanded, we believe the project's upside potential now outbalances its perceived risks. **This project has the unique potential to be the largest rock phosphate resource in North America and farmers can hardly wait for it to be developed.**

- We highly recommend the stock at current prices for early-stage, high risk investors with tolerance for moderate junior mining risk/reward ratios.

RISKS

- Lack of capital availability, resource suitability/limitations, negative market forces (price & demand), environmental restrictions, extraction & local infrastructure suitability.

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